Lectures
ON THE
RELATIONS OF THE TUBERCLE BACILLUS TO PHTHISIS.

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LECTURE II.
ITS INFLUENCE ON THE CLINICAL HISTORY AND TREATMENT.

GENTLEMEN,—We now come to the clinical aspect of the question, and it would be best to approach the subject, first, by the light of the evidence of physical signs, and, secondly, by that of the constitutional and local symptoms, such as pyrexia, wasting, cough, expectoration, and general aspect. Do we find bacilli in the sputum of patients in the stage of early consolidation, where the physical signs are slight and limited to a very small region—for instance, the supra-clavicular or the supra-scapular? My experience would answer in the affirmative, provided there is any expectoration to examine, which is often a difficulty. Objection will be at once raised by sceptics in physical signs, who will assert that in no case can we be quite certain of the absence of excavation. While admitting that many cavities are overlooked, and that small ones, especially when deep-seated, are very difficult to detect, I maintain that a case like the subjoined does not admit of much doubt.

CASE 2.—Edith C——, aged seventeen, milliner and dressmaker, admitted on Dec. 30th, 1882. No family predisposition. Has had pain under the right clavicle for three months, which kept her in bed and out of work for one week. She states that she has no cough, but that some expectoration follows a tickling in the throat. She has not lost flesh or had night sweats. At present her breath is not short. Tongue clean; bowels and catamenia regular; temperature and pulse normal; weight 8 st. 6½ lb. Dr. Percy Kidd, who admitted her in my absence, found weak respiration with prolonged expiration in the first interspace and above the scapula on the right side.—Feb. 22nd, 1883: Has gained 6 lb. The expectoration is so scanty that it is difficult to obtain any; it has been examined three times for bacilli; on the first two occasions none were found, but on the third a few were detected. Physical signs: Tubular sounds audible in the first and second interspaces.—March 15th: Has improved in strength, and a little in weight, being now 8 st. 13½ lb.; bacilli present in the expectoration, but very scanty. Physical signs: Tubular sounds in first and second interspaces, with occasional crepitation in the first interspace on coughing. Temperature 98·4° F. (A specimen of this patient's sputum now under the microscope shows from five to ten bacilli in the field.)

In the foregoing case the signs may be said to have developed while under observation, the crepitation, be it noted, appearing at a later date than the prolonged expiration or tubular sound. The bacilli could only have reached a small number of the alveoli, and detection was consequently very difficult. The extension of the disease is generally accompanied by either an increase in the bacilli, or, if they had previously disappeared from the sputum, by their reappearance. It is not always easy to find cases of this sort without the presence of a cavity, which, small though it be, would by some observers be considered the source of all the bacilli present. I think, however, that in the subjoined instance the fine crepitation indicated for the most part fresh tuberculisation, especially as on the right side its diminution was unaccompanied by cavernous sounds, and on the left side the tubular sound which followed was associated with increase of dulness.

CASE 3.—Jessie B——, aged thirty-one, servant, admitted on Jan. 31st, 1883. Her mother died of phthisis at the age of forty-six, one brother at twenty, one sister at twenty-nine, and another at twenty. She had inflammation of the lungs following measles, but completely recovered. Cough came on eleven months ago, and has persisted, accompanied by abundant expectoration, occasionally streaked with blood. She has had night sweats, and has wasted considerably. At present she complains of pain in the left chest; cough is severe; expectoration scanty; breath short on exertion; no night sweats; appetite good; tongue clean; temperature 98·8°; weight 9 st. 8½ lb. Physical signs: Slight flattening with crepitation from the clavicle to the third rib on both sides; some tubular sound on the left over the same area. Crepitation audible above both scapulæ.—Feb. 8th: Cough improved; expectoration decreased; bacilli numerous.—March 1st: Cough about the same; expectoration partly grey, partly purulent; crepitation less on both sides of the chest.—15th: Improving; has gained 3 lb.; expectoration 1 oz., with bacilli in fair numbers. Physical signs: On the right side, crepitation diminished front and back. On the left side, dulness to the third rib, with tubular sound; crepitation less.—April 9th: Cough less; expectoration diminished; bacilli absent; weight 9 st. 13½ lb.; physical signs as before.

In this case the numbers of the bacilli corresponded pretty exactly with the activity of the tuberculisation, and when the disease became quiescent they disappeared from the sputum. This instance would come under the category of Mr. Cheyne, where the bacilli enter the lungs and not the body; though here the soil was well prepared by family predisposition. The general health was excellent, and there was fair hope of the disease remaining localised. The following case is somewhat similar, and the disappearance of the bacilli accompanied the subsidence of the physical signs.

CASE 4.—Frank R——, aged twenty-six, footman, admitted on March 19th, 1883. His mother died of some disease of the lung, and a brother and a sister are asthmatic. After exposure late one night, a year ago, when out with the carriage, cough and expectoration came on, and have continued ever since. Night sweats followed, and persisted for six months. He lost flesh at first, but has regained it lately. His breath has been short on exertion for some time. Has never had hæmoptysis. The cough at first was very severe, and ended in vomiting. The expectoration has been white and frothy, but lately has become somewhat opaque. At present his appetite is fair; tongue furred; some dyspepsia after food; bowels confined; temperature 98·4°; pulse 90; urine normal. Physical signs: On the left side, slight dulness with fine crepitation from the clavicle to the third rib; posteriorly, scattered crepitation audible over the upper half.—30th: Sputum examined, and found to contain twenty bacilli in the field, and these in a state of division.—April 9th: Cough more troublesome; expectoration increased; appetite bad. The patient states that he does not feel so well.—11th: Sixty bacilli in the field, of greatly varying lengths.—16th: Cough and expectoration somewhat less; complains of pain in the left chest. Physical signs: On the left side, crepitation somewhat more abundant in the posterior region.—17th: About thirty bacilli in the field, still greatly varying in length.—23rd: Physical signs about the same. No cavity can be detected. Cough and expectoration are moderate, and the patient is gaining weight.—May 7th: The patient is not so well, and coughs more. Crepitation has increased, and is audible as low as the firth rib on the left side. Since admission the temperature has once risen to 100°, and the morning records have as a rule been subnormal.

The above seems to be a case of advancing tuberculisation of one lung; and the interesting feature is that the spread of the crepitation downwards was preceded by a division of the bacilli noted on March 30th, and their being detected in greater abundance in the field on April 11th, when they were still found to vary considerably in length, as if there was a prospect of further multiplication and consequent spread of disease.

CASE 5.—Arthur B——, draper's clerk, aged thirty, admitted on March 19th, 1883. For eight years he has been subject to winter cough, and for four years cough has been continuous, and during the last two years he has complained of shortness of breath, which increased so much at Christmas, 1882, and was accompanied by such debility that he had to give up work. Two years ago he had slight hæmoptysis, and night sweats have occasionally appeared. He has during this time lost more than a stone in weight. At present he complains principally of shortness of breath, especially on exertion, cough severe night and morning; expectoration yellow, but sometimes frothy. Physical signs: Slight dulness with crepitation from clavicle to the lower edge of fourth rib on the right side. Sonorous

rhonchus audible at the base posteriorly. — 30th: The sputum contains a few bacilli.—April 2nd: Breathing rather easier, but patient weak and languid. Cough less, expectoration scanty. Physical signs on right side the same as before, on left side some wheezing and rhonchus are audible.—9th: Cough and expectoration less. Sputum contains a fair number of bacilli, forty in the field. Some single ones, but many in faggot groups of two, three, and four. The bacilli vary in appearance. Some are simple rods without beadings, and others again show the beading well.—16th: Breath still rather short; expectoration deeply stained with blood during the last few days. Fine crepitation is audible in the interscapular region on the left side.—17th: Forty bacilli in the field, still varying in size.—23rd: Fine crepitation is also audible at the right posterior base.—May 7th: Cough rather worse, expectoration same in quantity but tinged with blood. Temperature rises at night to 100°. Physical signs the same.—June 4th: Expectoration has diminished. Temperature high at night. Physical signs the same on the right side; on the left there is crepitation at the extreme base anteriorly, and in the scapular and interscapular regions posteriorly. No cavernous sounds can be detected anywhere. Examination of the sputum shows abundant bacilli, fifty in the field, and with well-marked beadings.

In the foregoing case the disease undoubtedly progressed, the physical signs indicating increase of tuberculisation in the same lung, and also extension to the opposite one. No cavity was detected, but with a history of so long standing we cannot be sure of the absence of such. The main feature of the case was progressive tuberculisation, and we may fairly connect with this the large number of bacilli, the increase between March 30th and April 9th, and the well-marked bundles which are so characteristic of active changes.

The above cases might be easily multiplied; but they will at any rate suffice to demonstrate that the bacilli are present in the sputum when only consolidation can be detected, and we may conclude that their number corresponds to the number of alveoli in which tubercular changes are proceeding. Moreover, where a small and quiescent cavity is known to exist in one lung and the physical signs indicate an extensive spread of tuberculisation in the opposite lung, without any defined spots of coarse crepitation or gurgle to signify that fresh excavation is taking place—if under these circumstances we find an increase in the number of bacilli in the sputum, we are fully justified in attributing such increase to the fresh tuberculisation, and not to the old quiescent cavity.

The relation of the bacilli to the process of excavation appears to be very intimate, and their numbers increase largely while the latter is proceeding. Even when there is apparently no cavity extension they are found in the sputum, and continue to be so as long as there is any discharge from the cavity. Cases 6 and 7 are good instances of their relation to caseation and softening.

CASE 6.—William S——, aged twenty-six, labourer, was admitted February 2nd, 1883. No family predisposition. Has been subject to winter cough for some years. After a succession of wettings last Easter, cough with expectoration increased, and his breath became shorter. Six weeks ago there was slight hæmoptysis, and he has had night sweats for three months, and has been losing flesh since Easter, having wasted to the extent of two stone. At present cough troublesome, expectoration muco-purulent and aerated; breath short, night sweats severe. Tongue has an irritable look, appetite very poor; the patient suffers from dyspepsia. Pulse rapid, temperature 100·6°. Physical signs: Right side, crepitation to the third rib, with some tubular sounds. Left side, crepitation to the fourth rib; crepitation audible above both scapulæ. — 12th: Has had diarrhœa for two days; three motions a day; is sweating less. Temperature has ranged from 97° to 99° in the morning, and from 100° to 103° in the afternoon.—19th: Diarrhœa ceased; breath short on exertion; bacilli in sputum abundant. The evening temperature has ranged from 100° to 102°.—26th: Has complained of pain in the right side for the last few days, and friction is audible over the lower front. The pain has been relieved by strapping; cough very troublesome; bowels rather relaxed. Physical signs: Cavernous sounds audible on the left side over limited areas in the first, third, and fourth interspaces, where there is some flattening and retraction of the spaces on inspiration. The heart is apparently uncovered by lung. On the right side the crepitation remains the same. Bacilli scanty.—March 5th: Cough and expectoration less; appetite improving. Physical signs the same. Bacilli in sputum scanty. The temperature has fallen, ranging from 98° to 99·8°.—19th: Symptoms have become worse; temperature rises to about 101° every night. Cough worse; the patient is unable to lie long on one side. Physical signs: On the left side cavernous sounds more marked, with less crepitation. On the right side crepitation greatly diminished, with doubtful cavernous sounds under the clavicle. — April 2nd: Cough more troublesome, accompanied by retching; expectoration increased; night temperature ranges from 101° to 102°; night sweats troublesome; on the left side physical signs as above; on the right side crepitation has extended to the fifth rib; bacilli few and dividing.—9th: Cough about the same; expectoration muco-purulent, with patches of pigmentation; temperature at night 100° to 102°; bacilli abundant, sixty in the field, either single or in groups of three; they have well-marked beadings, and apparently are in a state of division.—16th: Symptoms about the same; on the right side crepitation is increased front and back; cavernous sounds are audible on the left side to the fourth rib. Evening temperature 101°.—May 8th: Patient worse; has wasted greatly; more crepitation is heard on the right side front and back; cavernous sounds detected in both lungs.

The increase of the bacilli seems in this case to have preceded the detection of the excavation by a considerable period, a week elapsing between the noting of "abundant bacilli" and the cavernous sounds being heard in the left lung. On the right side the physical signs came before the increase of the bacilli, but later on the lung excavation changes were accompanied by great activity of the bacilli. Their numbers increased, they showed well-marked beadings or spores, and arranged themselves in the little faggot bundles which generally indicate, or usher in, fresh tubercular outbreaks. The appearances of division mentioned in this case are when the bacilli show greatly varying lengths.

CASE 7.—Wm. B——, a bricklayer, aged forty-six, was admitted on Feb. 5th, 1883. His mother and two brothers and sisters asthmatic. History: The patient has had cough for two winters, which has become persistent since last March, and is accompanied by expectoration. He has had shortness of breath for two or three years, which has lately increased. For twelve months he has lost flesh to the extent of a stone. He has never had hæmoptysis or night sweats. Cough troublesome; breath short on exertion; tongue slightly furred. Temperature and pulse normal. Expectoration frothy, with some yellow streaks, and contains abundant bacilli. Weight 8 st. 2¾ lb. Physical signs: Chest hyper-resonent; wheezing and sonorous rhonchus audible over the whole lungs; slight dulness in the first intercostal space on the left side.—19th: Cough about the same; physical signs the same; bacilli in sputum still abundant.—26th: Cough more troublesome; expectoration abundant; some crepitation in the left side in the fourth interspace on coughing; wheezing and rhonchus audible everywhere; bacilli abundant and dividing.—March 5th: Has suffered much from cough and wheezing, but now the former is easier and the expectoration much less; bacilli few in number.—April 2nd: The breathing has improved during the last few days. The expectoration is very abundant, yellow, and comes up easily. Pulse 104; temperature 99·2°; respiration 22. Bacilli very few in number. Physical signs: Less rhonchus over the entire lungs, and now chiefly confined to the left side. Doubtful cavernous sounds audible above the left clavicle on coughing.—9th: Cough less; breathing better; expectoration diminished; appetite good; distinct cavernous sounds above the left clavicle; bacilli few, four or five in the field, with an occasional group of three.

This case is interesting with reference to its diagnosis, as well as regards the progress of the cavity formation. There was a strong family history of asthma, and dyspnœa appears to have accompanied, if it did not precede, cough in the history. Had it not been for the wasting and slight dulness in the first interspace on the left side we would hardly have expected phthisis, especially in a man of forty-six, and while the abundant expectoration made us suspect excavation, the examination of it settled all doubt, though it was not till the wheezing and rhonchus had entirely cleared up, that we were able to hear the cavernous sounds. Possibly had we examined for lung-tissue this might have been made out earlier. The reduction in the number of bacilli when excavation had finished was as marked as in Case 6. The following case is an example of excavation taking place in

phthisical consolidation following pleurisy, the bacilli being present during the period of lung destruction.

CASE 8.—Albert B——, a labourer, admitted Jan. 19th, 1883, aged nineteen. No consumption in the family. He had pleurisy at fourteen, and has since had three attacks, the last being in March, 1880. Cough constant since the pleurisy, and worse in winter; it has been increasing lately. Expectoration has diminished, but is thick, greenish-yellow, sometimes frothy. He had hæmoptysis to the extent of twelve to fourteen ounces two years ago. Has had occasional night sweats, but none lately, and has lost flesh since 1880. At present he complains of pain in the right chest, palpitation, shortness of breath, and cough. Physical signs, dulness in the lower third of left chest anteriorly, and the upper half posteriorly. Crepitation on cough, audible in the first interspace. Weight 10 st. 7½ lb.—Feb. 5th: Expectoration has been slightly streaked these last three days; cough less; bacilli abundant in the sputum.—19th: Expectoration again streaked, but contained no bacilli.—March 12th: Gaining weight rapidly and improving; no bacilli in sputum.—20th: Improving; has gained 9 lb. in weight; cough slight; expectoration yellow. Physical signs: Left side, tubular sound below the clavicle, slight dulness in the first two interspaces, slight crepitation on cough in the second interspace; cavernous sounds heard posteriorly above the scapula; sputum contains bacilli.—11th: Has improved and gained nearly a stone during his stay in the hospital. Cough moderate; expectoration slight; breath short on exertion; bacilli scanty, about six in the field of the microscope.

(To be concluded.)

MALARIOUS CHOLERA.

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(Concluded from p. 230.)

CASE 5.—Purraga Poonja, undergoing a seven years' sentence, at Yerrowda since four years, age about thirty-two years, of a good constitution, had suffered from intermittent fever previously, but is now free from it, and had been transferred to the surgical ward, some boils having broken out on his legs.—August 13th, 7 A.M.: At midnight he was seized with vomiting and purging; during the night he vomited and purged four times. The evacuations were copious, watery at first, tinged with bile, afterwards clear; he looks tired; the features are drawn; the eyes somewhat sunken; the skin cool; the extremities cold; temperature in axilla 97·3°; pulse very small and weak, 84; complains of slight cramps; has not passed any urine. 5 P.M.: No return of the vomiting and purging; reaction pretty good; pulse 92; temperature in axilla 100°; great thirst; had passed a small quantity of dark-coloured urine; complains of much weakness.—14th, 7 A.M.: No return of vomiting or purging; features more natural; pulse equal, regular, 88; temperature in axilla 100°; has passed water freely. 5 P.M.: Doing well. The case was a mild one; the recovery was rapid; he was discharged well on Aug. 17th. The treatment was the same as in Case 4.

CASE 6.—Teepia Laddoo, undergoing a seven years' sentence, at Yerrowda since three months, aged about thirty years, of a weakly constitution, was admitted into hospital at 4 P.M. on December 1st, 1875, presenting the following symptoms:—He was suddenly seized with violent purging and vomiting, and previous to admission he had already passed several copious, colourless watery stools, the vomited matter being at first tinged with bile, afterwards quite clear. The countenance is anxious, the eyes sunken, the voice hoarse, the skin clammy and cold; temperature in axilla 97·2°; pulse very small, weak, and frequent, 120. Complains of great thirst and of severe cramps in abdominal muscles; slight cramps in the lower extremities; breathing hurried, 36. 4 P.M.: Has been purged and vomited several times; temperature in axilla 98°; pulse very weak, less frequent, 108. General symptoms the same; urine suppressed.—2nd, 7 A.M.: No vomiting since last report; passed a semi-liquid stool this morning, bilious-looking. Urine still suppressed; skin dry and slightly warm; temperature in axilla 99·3°; pulse weak, 88; tongue brown and dry; no cramps, but great abdominal tenderness; great thirst; urine suppressed. 4 P.M.: Has passed water freely, of a deep amber colour; specific gravity 1020, acid, containing no albumen; temperature in axilla 100°; pulse stronger, but easily compressible, 92. No return of vomiting; passed a bilious motion. He appeared much better the following day, the choleraic symptoms not returning; but abdominal tenderness persisted. The tongue was at times dry and furred. A bilious mucous diarrhœa, occasionally containing specks of blood, set in; the pulse remained somewhat above the normal, and was hard and small; the temperature in the axilla varied from 99·3° to 100°.—11th, 7 A.M.: Passed a restless night. Had three motions during the day, and two at night. The dejecta are semi-liquid, scanty, bilious, containing some mucus, but no blood. Complains of pain in the abdomen, which is increased by deep pressure, whilst a moderate pressure is not complained of. No relish for food. Temperature in the axilla 98·2°; pulse soft and small, 92. 4 P.M.: Towards 11 A.M. a slight exacerbation set in. Temperature at the time of report 100°; pulse 104. The two following days his condition remained very much the same. Towards the evening of the 13th he had a return of the choleraic symptom, but blended with those of the severe abdominal lesion from which he was suffering. At 7.30 A.M. on Dec. 13th we read in the notes of the case: "Had one copious evacuation just now, very offensive, of a dark-brick colour, evidently containing much blood intimately mixed with the discharge; a little mucus floats over it; the pulse cannot be felt at the wrist; the countenance is anxious; the face pinched; eyes sunken; voice weak; tongue cold at the tip; extremities cold; no cramps; respiration hurried; temperature in axilla 98°. At 9 P.M. a slight reaction took place, leaving the pulse very weak and small; the urine still suppressed."—14th, 7 A.M.: Passed a copious dark-red motion, similar to that of the day before, but even more offensive; abdomen slightly distended, and very painful even on slight pressure. Temperature in axilla 98°; pulse very weak, 92. The eyes are sunken; the extremities cold; he is perfectly sensible, and complains of abdominal pain. Died at 3 P.M.—Treatment: During the stage of collapse the treatment was the same as in the other cases. On the disappearance of the choleraic symptom, quinine both by the mouth and hypodermically was freely given, as in the former cases. Against the abdominal symptoms the following treatment was adopted: Fomentations; small doses of castor-oil, with tincture of opium; Dover's powder at bedtime; seven parts of belladonna liniment to one of chloroform liniment applied to the abdomen on spongio-piline, cold water enema, &c. The diet consisted of milk and yelk of eggs; a little arrowroot or sago in beef-tea; brandy was given with eggs during the last few days.

Necropsy, fifteen hours after death.—Weather cool. Rigor mortis fully developed. Head: On opening the skull the large vessels are seen distended by a pinkish serous fluid, whilst the capillary vessels are well defined and of a dark-black colour. Brain: The grey substance is of a pale-rose colour superiorly; of a slatish tint, getting darker towards the inferior part of the brain. White substance of a rose colour; some serosity escapes on section; many of the puncta vasculosa are of a dark colour, like small grains of powder, more numerous and darker towards the centre of the brain; they are well marked on the floor of the lateral ventricle. These are with difficulty removed by gentle friction with the knife; under the microscope they seem to consist mostly of an irregular, sharply defined, granular substance. The left ventricle contains about a drachm of clear serum, the right somewhat less. Chest: The external appearance of the lungs is very remarkable, being covered with extensive dark-black patches and lines; the base and inferior margin of the lungs are almost uniformly black; the lungs are crepitant; some engorgement exists in the inferior lobes posteriorly, and more marked in the left lung. Heart healthy, small; a small soft black clot is found in the right auricle. Abdomen: The abdomen is considerably distended; on opening the cavity, the omentum is seen rolled up and of a dark-brown colour; the peritoneum contains no fluid nor any signs of recent inflammation, except around the omentum; the large intestine is considerably distended and of a dark-slate colour; in parts this dark colouration is intense. On examining the large intestine the mucous membrane is found in many places to be the seat of small deep ulcers, looking as if punched out; the largest are about half an inch in diameter. These ulcers are surrounded by a circle of fine black lines formed by capillary

vessels distended by a black substance which under the microscope appears to consist almost entirely of black granular matter. Several of these ulcerations extend to the serous layer. In the transverse colon several of the ulcers have perforated the bowel, which is only protected by the omentum adhering intimately to it by a thick layer of plastic lymph. On separating this layer with great care, the transverse colon is seen to be cribbled with numerous small rounded perforating ulcers, all presenting around them the peculiar ring of closely packed and beautifully defined dark minute capillary vessels. The appearance of the small intestine is normal, except some patches here and there of a darker hue; no ulcerations are found in it. The stomach also presents some patches of a darkish colour, but is the seat of no ulceration; its mucous membrane is easily torn, and appears swollen. Liver: Weight 3 lb. 4 oz. Posteriorly towards the base, and at the extremity of the right lobe, it is of a dark-brown colour, but only superficially; with this exception the appearance of the liver is normal. On section it appears moist, and gives issue to a certain quantity of serous fluid, and by pressure this fluid is readily obtained. The gall-bladder contains a couple of ounces of dark-brown bile, thick and ropy; abundant flakes of cholesterine are found suspended in it, adhering to thick mucus. Spleen: Weight 14 oz., small; the capsule is shrivelled, and apparently of normal consistence and colouration. Kidneys: The cortical substance is of a dark-slate colour, more marked in the left kidney, where the appearance is remarkable; otherwise healthy. Some blood taken from the mesenteric veins and examined under the microscope reveals the presence of free granular pigment, some contained in what appears to be large hyaline cells.

All medical men residing in India have but too often occasion of attending cases of cholera; nevertheless, when I witnessed my first case of malarious cholera, I remained awhile under the impression that I had to deal with a case of real cholera. No symptom appeared to be wanting. Vomiting, purging, anxiety, rapid breathing, loss of voice, pulse weak or imperceptible, skin shrivelled, eyes sunken, loss of voice, cramps, coldness of the surface, &c., all the symptoms characteristic of cholera, were present. Still there are differences, and these are of great importance as assisting us in diagnosing between the two diseases. In malarious cholera the vomiting and purging are less frequent, less distressing, and these symptoms cease at an early date. The alvine discharges contain generally some bile, or are tinged with blood, or are like dirty water, or almost clear, but never presenting the whitish appearance so well known as rice-water stools. The cramps in the cases I have observed have been limited to the abdominal muscles and lower extremities. A third point of great moment is the rapid reaction, or rather the almost total absence of reaction, the patient passing from a state of deep collapse to one of convalescence in the space of a few hours, and with a return of all the choleraic symptoms should the following paroxysm not be checked. The influence of treatment is also well marked. In India we are well aware of the danger of administering stimulants and opium during the collapse stage of cholera; in the sideration produced by malarious poisoning these two remedies are indicated and are followed by the best results. Again, the value of quinine points to the intimate nature of the disease; in five cases out of six this drug acted favourably, and no return of the dangerous paroxysm took place. The fatal case afforded us an insight into the pathology of the disease, and nowhere are the differences and distinction between the two forms of cholera better marked and ascertained. In malarious cholera post-mortem reveals a condition of intense melanæmia; a separation of the blood pigment, the blocking up of the capillaries by this altered substance, the presence of a rose-coloured serous fluid in some of the large bloodvessels, and of a dark thick fluid in others.

In malarious cholera, if we take the fatal case here recorded as a guide, we find that the morbid action acts with greater intensity on the circulation of the alimentary canal, the stasis of pigment in the capillary circulation of the large intestine producing partial necrosis of the intestinal coats, manifest in this case by numerous small deep ulcers in the ascending and transverse colon, surrounded by a perfect ring of obliterated capillary vessels. In another case of pernicious fever which ended fatally, and which was entered under the name of "congestive," the localisation of the disease did not exist as in this case of malarious cholera, whilst the symptoms during life were those of congestion of all-important organs, not limited to the digestive tube. As a comparison I extract the following from the notes of the post-mortem examination of the cases just mentioned: "The grey substance of the brain is of a dark-brown colour; the white substance is dirty-looking and cribbled, with black spots. Externally the lungs are quite black, only here and there a few spots are of a normal colour. On section this dark colouration is seen to permeate the lungs almost completely. The muscular tissue of the heart is of a uniform brown colour. The inferior margin of the liver is intensely black, its superior aspect being dotted with black spots. The gall-bladder contains some two ounces of dark-black bile, ropy and full of cholesterine scales. The spleen is small, of a dark-slate colour, and having a fleshy appearance. The large intestine is here and there deeply injected, showing dark circular rings, but no ulcerations; the mucous membrane is somewhat swollen in the centre of the rings. The kidneys are of a dark-slate colour. The vessels of the brain and of the internal organs are distended by dark-black thick blood; superficial blood-vessels empty, or containing pale rose-coloured serum." In malarious cholera, melanæmia, the result of intense malarious poisoning, is doubtless the primary and essential cause of this peculiar disease; the collapse, the disordered condition of the circulation, and of the digestive organs are due to the altered condition of the blood and to the obliteration of the large capillary circulation of the intestinal canal by modified blood pigment.

I wish to call attention to the condition of the spleen. In the fatal case it was found shrivelled, but apparently of normal consistence and colouration. In all cases of pernicious and remittent fevers examined after death I have found the spleen almost normal in size, although not necessarily healthy. I believe that the alleged constant increase of volume of this organ in malarious fever is an error, and that the pathological condition of the spleen in certain forms of malarious fevers requires further investigation. According to the observation I have been able to make, it appears to me that enlarged spleens are more generally found among the inhabitants of certain malarious localities than of others, and as a rule this condition shows itself when malarious fever has been contracted after drinking water obtained in malarious localities. For instance, the inhabitants of the Gheer, a forest district in the province of Kattiawar, contracted rapidly enormous spleens after a few paroxysms of fever only; and it is a fact well known to travellers in that district that a residence in the Gheer is not followed by fever if the precaution be taken of carrying a supply of drinking water whilst crossing or dwelling in that forest. Large spleens are also met with when the cold stage of intermittent fever is intense and prolonged. Among the 1756 cases of malarious fever which I have attended during the past ten months, I have generally found this to be the case, and I now look upon a moderately enlarged spleen as a favourable symptom, having seldom met with this condition in the 93 cases of remittent fever or in the 10 of pernicious fever treated during that period.

Tabular Statement, showing the Weight, Appearance, and Condition of the Spleen in Malarious Affections.

	Name of disease.	Weight of spleen.	Appearance and condition of spleen.
1.	Remittent fever	14oz.	Normal on section.
2.	" "	8oz.	Small, shrivelled, normal.
3.	" "	12oz.	Shrivelled; hard, dark-brown colour; cuts like the liver.
4.	" "	12oz.	Normal.
5.	" "	9oz.	Shrivelled, rather firmer than normal.
6.	" "	16oz.	Capsule shrivelled, moderately firm, deep brown colour.
7.	Remittent fever and melanæmia	21oz.	Dark colour towards convex surface, elsewhere of a light-brown colour, fleshy, hard, and resistant; contains dark-black blood.
8.	Remittent fever and melanæmia (chronic case)	2¼oz.	Shrivelled; looks like a piece of raw muscle; firm; no splenic mud.
9.	Malarious dysentery	6oz.	Normal.
10.	Malarious dysentery	7oz.	Carnified; no splenic mud; of rich brown colour.
11.	Pernicious fever (congestive)	10oz.	Dark-slate colour, gorged with black blood; easily torn.
12.	Pernicious fever (congestive)	7oz.	Small, very soft; contains black blood.

In Cases 1, 6, and 7 there is a previous history of repeated attacks of quotidian intermittent fever, and the slightly en-

larged spleen existed in that condition previous to the fatal illness. On the other hand, the peculiar condition of the bile in cases where melanæmia, even in a slight degree, is present, is very characteristic. Generally the gall-bladder is somewhat distended, and contains from two to three ounces of dark-black bile, very thick, ropy, full of small bright scales of cholesterine, and gives a slight acid reaction. This condition was well marked in the fatal case of malarious cholera, in two of the congestive forms of pernicious fever, and in cases of remittent fevers, where the fatal course was rapid.

Poona.

ON THE

DEVELOPMENT AND COAGULATION OF THE BLOOD.

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(*Continued from p. 227.*)

ON THE ACTION OF OSMIC ACID ON THE BLOOD.

On the albumen.—The peculiar property possessed by osmic acid of coagulating or fixing the form of the red blood-corpuscles was first discovered by M. Schultze, and has been wrongly attributed by one of my critics to Prof. Ray Lankester.[1] I have determined that the action of this agent is confined entirely to hæmoglobin—that is to say, it exerts no immediate coagulating influence upon the albumen of the blood. Its action is confined to the red discs, and to these in the exact proportion of the amount of hæmoglobin they contain. The degree of action of the acid upon the hæmoglobin of the corpuscles will of course depend upon a variety of circumstances, such as strength, quantity, mode of application, and length of time. I am not aware that any experiments have been made with a view of determining with precision the action of this agent, or even the strength of it, which can be obtained and used. I have, therefore, instituted a series of experiments with the view of ascertaining more thoroughly what its action upon the blood may be. I have sought to know whether in addition to fixing the form of the corpuscles and rendering them rigid, it also fixed the colouring matter in them, and prevented its exudation into the surrounding liquid, and if so what strength and what length of time were required, and also if the colouring matter underwent during the process any change. In order to test these points a glass trough was made, divided into ten compartments and measuring from front to back in the inside three centimetres. The first compartment of the trough was filled with clean distilled water. The second compartment with a mixture consisting of water, 100 parts, and three-fifths of one part of a 7 per cent. solution of albumen, this being the strength and proportion of the albumen in the blood.[2] The third compartment was filled with water, 100 parts; 2 per cent. osmic acid solution, 1½ part; and three-fifths of one part of a 7 per cent. solution of albumen. The fourth compartment contained water, 100 parts; blood, one part; 2 per cent. osmic acid solution, two parts. The fifth, water, 100 parts; blood, one part; 2 per cent osmic acid solution, two parts. The sixth, water, 100 parts; blood, one part; 1 per cent. osmic acid solution, two parts. The seventh, water, 100 parts; blood, one part; ½ per cent. osmic acid solution, two parts. The eighth, 5 per cent. solution of sulphate of soda, 100 parts; blood, one part; 2 per cent. osmic acid solution, two parts. The ninth, 8 per cent. solution of chloride of sodium, 100 parts; blood, one part; 2 per cent. osmic acid solution, two parts. The tenth space contained a very weak solution of blood, just capable of showing the oxyhæmoglobin bands in this thickness, introduced as a standard of comparison. In the preparation of these mixtures the osmic acid which was added to the solution of albumen and to the blood was allowed to remain in contact with them for twenty minutes before diluting with the water, except in the fifth case. The mixtures were allowed to settle, and the clear supernatant liquid drawn off and placed in the respective cells. During the process of subsidence, which extended over some hours, it was noticed that the solution of osmic acid and albumen assumed a greenish tint, though remaining perfectly transparent, and this darkening action was seen to be progressive.

A photograph was taken of the whole series by transmitted light on the assumption that the photogenic rays would be shut back or filtered out, as it were, in the precise ratio of the obstructing power of the colouring matter present. This device for testing the power of the different strengths of osmic acid to fix the colour in the corpuscles would have been most perfect but for one unforeseen though not surprising circumstance—viz., the darkening influence of the osmic acid upon the albumen, which was, however, less marked in the case of the serum albumen than in that of the artificial preparation.

The general conclusions derivable from this series of experiments are, that, if time is given, even the weaker solutions of osmic acid are competent to fix both the form and the colour of the corpuscles by coagulating the hæmoglobin, and also to bring down hæmoglobin from solution if the corpuscles have been previously dissolved. Contemporaneously with this action on the red corpuscles the albumen is darkened, and this darkening is progressive in its action, leading after several days' contact to deposition of the albumen as a dark-green, flocculent precipitate, which is probably a combination of albumen with the metal osmium. No absorption bands are obtainable with the darkened albumen solution or the deposit which it ultimately yields.

On the hæmoglobin.—Not only does osmic acid fix the form of the red corpuscle, and lock up its colouring matter, but it likewise induces certain changes in its colour. Anyone who will take the trouble to compare an ordinary microscopic specimen of blood prepared with and without osmic acid, will see at once by a mere naked-eye inspection that a great change has taken place in the latter, the ordinary blood colour having given place to a greyish tint, and the difference is further seen under the microscope, the corpuscles no longer having the pale-yellow or lemon, but a glassy, green tint. The change is rendered still more certain when the blood is examined by the spectroscope, as the bands of hæmoglobin are no longer present. This inability to detect the absorption bands in specimens of blood under the microscope led to a more careful examination of the action of osmic acid upon solutions of hæmoglobin. A description of one of these experiments will explain what occurs. Six cubic millimetres of blood are dissolved in 300 cubic millimetres of water, and to another 300 cubic millimetres of water are added 12 cubic millimetres of a 2 per cent. solution of osmic acid. This solution is added by instalments to the solution of blood. At first the value of these instalments was 10 cubic millimetres. On the first addition, a very faint band appears in the red; on every additional increment up to 50 cubic millimetres this band becomes stronger, and at the same time the usual hæmoglobin bands in the green become more distinct, owing to the fact that the undiluted blood solution was at first too dense for them to be well seen. Simultaneously with these changes the blood becomes browner. After this point is reached, the oxyhæmoglobin bands become paler and the solution more decidedly brown; and by the time eighty cubic millimetres have been added the band in the red has reached its maximum, and the oxyhæmoglobin bands are seen with extreme difficulty, the lower band being the plainer of the two. The next addition causes a slight weakening of the band in the red, and on the addition of forty more cubic millimetres, or 120 in all, this band becomes narrower and still paler. It goes on increasing in feebleness; and when 200 cubic millimetres in all have been added, it is as faint as when it first put in an appearance after the addition of the first ten cubic millimetres. After the addition of forty more cubic millimetres, it can scarcely be seen, and appears broader, like a faint shading, and at the end, after the addition of 300 cubic millimetres (all the solution originally prepared), it remains the same, and also after the addition of another 100 of the same strength. During this process the blood becomes progressively browner and muddier, a brown flocculent precipitate appears, and at length the whole of the hæmoglobin is precipitated, leaving the liquid comparatively colourless and transparent. From such experiments we learn that when osmic acid coagulates the hæmoglobin and fixes its colour, it also converts it into a

[1] Professor Lankester was probably one of the first in this country to use osmic acid, but he never laid any claim to the discovery of its peculiar action on the blood-corpuscles.

[2] The albumen in the blood is 70 parts in 1000, or 7 per cent.; and, as ascertained by experiment, in a cubic millimetre of blood we have two-fifths corpuscles and three-fifths liquor sanguinis.

new body, known to chromatologists under the name of methæmoglobin.

On the colourless disc.—The previous experiments demonstrate, I think, that osmic acid exerts its action principally upon the hæmoglobin of the blood discs, which it can both coagulate and precipitate, and the absorption bands of which it can modify; it will therefore follow that its action upon the blood-corpuscles is directly proportionate to the amount of colour, or of hæmoglobin, they contain. This conclusion is entirely corroborated by the photographs of the blood-discs. To those who consider that the blood-discs are all alike pretty equally coloured, it will therefore present itself as a perfect preservative of the red discs, and such will be prepared to find in the blood, after its efficient use, no other morphological element but red and white corpuscles; indeed, the use of osmic acid has been urged as crucial against my discovery, and an experiment in a watch-glass put forward as fatal to my pretensions. This is the experiment:—"Two large drops of a 2 per cent. solution of osmic acid are put into a watch-glass, and into this is squeezed a small drop of blood, and stirred rapidly with a glass rod; from this mixture were taken at intervals of one, ten, and twenty minutes, small drops, which were run under mica covers for microscopic examination. In all except the first specimen the liquor sanguinis remained perfectly clear and colourless, and the corpuscles packed beautifully. Not a trace, however, of the invisible corpuscles could be found, though sought for diligently." Ten or twenty minutes' action of a 2 per cent. solution of osmic acid is deemed sufficient by this writer to preserve all the red corpuscles from any assumed detrimental influence which might be exerted upon them in the way of decolouration by the mica cover, and to secure an entire absence of the invisible colourless discs of the blood. If this experiment and the conclusions based upon it were correct, it would have a very important bearing on my work; therefore I have carefully repeated it, following precisely the directions given, and also devising other methods which I deemed more trustworthy. It will be remembered that I have claimed that the colourless disc of the blood is its fibrin factor, and that it becomes directly transformed into fibrin under the combined influences of adhesiveness and motion; it follows therefore that, if in any given case we cannot find the invisible discs, we shall discover their equivalent in fibrin. When a small drop of blood is added to two large drops of a 2 per cent. solution of osmic acid, either in a watch-glass, or, better still, upon a glass-slide of suitable proportions, and the two are mixed intimately together, the red discs will be found in the main to have become adhesive, and to have aggregated into groups or masses. In some cases this aggregation is so complete as to leave no red corpuscles free, but in others the adhesion of some of them is slight, or they appear to be simply entangled in the masses, and may be set free by a little disturbance. These free corpuscles may run together; but they will never pack properly in the sense that I understand this action, because they are now coagulated and rigid, and have lost all that plasticity which under other circumstances enables them to apply themselves to the circular outlines of the invisible discs, and therefore even if the invisible corpuscles were present in their usual condition, the state of the red disc would be a complete bar to their proper display. In these osmic acid specimens nothing would be seen by an untrained observer but groups or masses of red discs, a few free red discs, an occasional white corpuscle, granules, and clear interspacial liquid, free from hæmoglobin. In the great majority of instances the groups or aggregated masses adhere to the slide or cover-glass. So far the experiment seems adverse, but we must not stop here, but ask what is the meaning of the adhesion of the red discs to each other and to the slide, and of the large amount of fibrin which in these specimens lies hidden away from view in the clear liquid, the presence of which has been entirely overlooked. On the view that we have in such an experiment fixed the red discs, so that they cannot become decolourised, this fibrin is quite out of place, for here at least the doctrine that fibrin is a product of decolourised discs, or of unstable corpuscles, which readily give up their colour, cannot be maintained; and it is equally difficult to imagine that it can be a product formed on the ordinary conceptions of fibrin, being due to the union of two substances, already in solution in the blood, combining under the influence of a ferment, for the presence of a substance like osmic acid in the blood is not calculated to favour fermentation. This immediate production of fibrin is, however, perfectly consistent with my view, long ago stated, that fibrin owes its origin to the direct transformation of the colourless discs of the blood—to discs, in fact, which as yet have never obtained any, or but a very slight amount of colour. The fact is that, although osmic acid possesses such a powerful preservative influence over the red disc by virtue of its chemical relations to hæmoglobin, its action upon the colourless and slightly coloured discs is very peculiar, and for a time at least is principally exerted in rendering them adhesive; and it appears that it is through their mediation that the red discs adhere together in groups, and the groups in their turn to the glass-slide. The osmic acid, in fact, converts the colourless discs into a species of adhesive cement, which is easily dragged out into fibres during the process of stirring, so that the more the agitation and the more intimately the osmic acid is mixed with the blood, the greater will be the amount of colourless disc-substance drawn out into fibrin. So far, then, the experiments with osmic acid, instead of disproving the existence of the colourless discs, render the most powerful support possible by demonstrating that their properties are *sui generis*, and that they never could have been red discs, or have held the relations to osmic acid which hæmoglobin holds. No chemical solution with the action of which we are at present acquainted will preserve the most primary forms of the discs of the "fugitive group." This is true, whether we experiment with advanced lymph discs or with the youngest blood discs. Neither the liquor lymphæ nor the liquor sanguinis can preserve the integrity of these bodies outside their proper channels, and they consequently undergo in both cases direct modification into fibrin. The mistake made by my critic lay in failing to examine before diluting with a large bulk of water the residuum of the blood in the watch-glass, and also the rod with which it had been stirred. I repeated this experiment, and found fibrin present in abundance in both these situations. The colourless discs are normally invisible in the blood, and continue invisible after the treatment with osmic acid; hence the films and the fibrin which they give rise to are liable to be passed over without recognition, nothing appearing to be present but red discs and white corpuscles. But even under ordinary methods of examination some slight traces of fibrin are often, by very careful inspection, to be seen; and if the obscuring liquid is removed the fibrin is abundantly evident, or it may be brought into view by means of an aqueous solution of aniline blue. Under the influence of this staining fluid the colourless disc-substance which surrounds the groups of red discs and cements them to the slide and cover-glass and to each other undergoes annulation, and is thus gathered up into prominent ridges, which, taking the stain, become exceedingly obvious. This property of annulating belongs only to the corpuscular elements of the blood, and under these conditions could be exhibited only by the colourless discs; for the hæmoglobin discs are all rigidly coagulated, and their colour absolutely fixed, and are seen from first to last to undergo no change. Whether the colourless disc-substance will display itself in layers and ridges around the red discs, or in the extended state of fibrinous threads, will depend upon the amount of agitation to which the blood is subjected when mixed with the osmic acid. If the agitation is moderate, the former condition will prevail; if excessive, the latter.

(To be concluded.)

A CLINICAL AND PATHOLOGICAL STUDY OF LARYNGEAL PHTHISIS.

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History.—Disregarding descriptions of and allusions to throat maladies by ancient and mediæval writers,[1] who doubtless in some instances refer, though indiscriminately, to laryngeal phthisis, we find that the existence of a laryngitis peculiar to phthisis was adumbrated by Morgagni[2] in 1764, advocated inconclusively during the succeeding half century

[1] See the numerous authors in Stephanus (Medicæ Artis Principes, 2 tom., Lutetia, 1567), under the headings in the index, "aspera arteria," "Ἀσθμα," "guttur," &c.

[2] De Sedibus et Causis Morborum, Lugduni Bat., 1767, lib. xv., 13, 14.

by Petit,[3] Sauvée,[4] and others, but first clearly insisted on by Louis[5] in 1825. The latter author, indeed, remarked that "ulcerations of the larynx, and especially those of the trachea and epiglottis, must be considered as lesions proper to phthisis."[6]

The dictum of Louis, however, being too indefinite, caused most observers of this period to confound all ulcerations of the windpipe under the name of laryngeal phthisis. To terminate this state of confusion, which was more than suspected by certain of the more acute pathologists, notably Trousseau and Belloc, the Academy of Medicine of Paris intervened in 1836, by proposing the "History of Laryngeal Phthisis" as the subject for a prize essay. Upon this the matter was taken up vigorously by Trousseau and Belloc,[7] who, working conjointly, gained the prize, and proved indisputably by their researches the existence of three kinds of ulcerations in the larynx—viz., phthisical, syphilitic, and cancerous.

The knot being thus far unravelled a new question for elucidation immediately presented itself—i.e., as to whether tubercle is actually deposited in the laryngeal structures. Louis, in fact, had expressly stated that he could find none, whilst Trousseau and Belloc mainly relied on the argument of analogy from the well recognised tubercular invasions of the intestines to prove the similar liability of the larynx;[8] but they simultaneously confessed that they had never seen any tubercular matter in the latter situation. Subsequent investigations of French pathologists coincided with this view, and the most weighty authorities—such as Andral,[9] Monneret and Fleury,[10] and Cruveilhier[11]—concurred in denying positively the presence of true tubercles in the larynx. Against this statement Barth[12] and Lheritier,[13] almost alone in their opposition, aver that they have seen unmistakable tubercle in that organ.

During this phase of the debate the German investigators are first heard in the discussion, and under the leadership of Rokitansky,[14] Günsberg,[15] Tobold,[16] and many others, affirm the existence of actual laryngeal tubercle. Amongst these the voice of Rühle[17] alone is raised in dissonance to contest such a conclusion and uphold the doctrines of French pathology. At this juncture Virchow[18] enters on the scene with a solution calculated to reconcile the adverse parties and rescue the subject from the field of controversy. This chief of pathologists explains in brief that most observers were accustomed to recognise tubercle only in its advanced or caseous form, whereas that "when miliary corpuscles are found in a membrane exposed to external injury they disaggregate, produce ulceration, simple and superficial, but do not become caseous or give rise to any tumour. To this class," he continues, "belong the tubercles of the larynx which give rise to laryngeal phthisis. ..... The larynx is recommended to those who wish to know true tubercle." And farther he states,[19] "I am absolutely convinced that laryngeal phthisis is due to tuberculisation of the larynx; this conviction is based on thousands of observations."

Nevertheless there is still a band of inquirers in active contention over this disease; and we find those who argue that deposit of tubercle is the primary and continuous cause of laryngeal phthisis, and those who oppose this view with the assertion that it originates in some common inflammatory lesion. For the former body Heinze[20] is the chief exponent when he exclaims: "Ulceration of the larynx and trachea without simultaneous or subsequent tubercle of the mucous membrane never leads to laryngeal phthisis." And as a prominent partisan of those biased in the other direction, Lefferts[21] may be selected from his statement: "Ample authority can be brought to substantiate the assertion that the disease is but a chronic ulcerative laryngitis existing in a consumptive patient, and modified in its course and results by the tubercular diathesis." But between the conflicting ranks the main body of laryngologists proceed inattentive to dialectics, and engaged only with the clinical demands of the malady.

Semeiology.—Considered *subjectively* patients affected with throat consumption make the complaints inseparable from any condition of cachexia, such as loss of strength, appetite, &c., combined with such special troubles as direct the observer's attention to the state of the throat internally. Of varied prominence these latter are alteration of voice, dysphagia, pain locally, cough, and dyspnœa.

(*a*) The invariable first symptom is probably alteration of voice, progressing from a mere necessity for increased effort in producing the laryngeal tones, through varying degrees of hoarseness, to complete aphonia[22]—i.e., extinction of sonorous articulation. The vocal troubles do not, however, bear a constant relationship to the structural alterations in the larynx, for, as Gerhardt[23] has pointed out, pressure on the right recurrent nerve as it passes through the thickened pleura of a tubercular lung may cause paralysis of the corresponding vocal band with a decided dysphonia, whilst in the case of females a slight congestion of the larynx will often produce aphonia of a character chiefly functional. The interference with speech is usually the immediate cause of the patients applying for medical relief.

(*b*) At a later stage difficulty of swallowing is likely to present itself; but not without exceptions, and the malady sometimes attains a fatal termination without this symptom. Dysphagia, however, being once felt mostly advances until great pain in deglutition provokes frequent regurgitation of food, and almost prevents the performance of the act. In the worst cases the pain is described as being of an intensely burning character, as agonising as an actual cautery, and remaining for some time after the throat returns to rest.

(*c*) In addition to the pain of swallowing there is always more or less tenderness of the larynx on pressure from without, as can be ascertained by grasping the thyroid cartilage between the forefinger and thumb, so as to approximate the cornua. This sign is present at a very early stage, and sometimes seems to precede all others. Nevertheless, pain when the larynx is quiescent is rarely present; a fact "the more remarkable," as Andral observes,[24] "because the larynx in health is the seat of an exquisite sensibility."

(*d*) With respect to cough, this symptom is more allied to whatever pulmonary lesions may exist than to those of the larynx. Great destruction of the laryngeal substance may take place, and cough be altogether absent. Should the lung affection be in abeyance, cough will commonly be so likewise. This fact is well illustrated in a case recorded by Krishaber,[25] in which ulcerative ravages proceeded in the larynx for five months without cough, whilst the lungs were not appreciably invaded. Subsequently, however, cough became a prominent symptom simultaneously with the chest lesions markedly declaring themselves. Cough in conjunction with laryngeal phthisis has the peculiarity designated by Trousseau and Belloc[26] as "eructant cough," from its similarity to eructation. This phenomenon is due to inability to close the epiglottis, and sounds like blowing through an open tube to expel the mucus. It much resembles the expectorative efforts through the cannula of patients on whom tracheotomy has been performed.

(*e*) Finally, dyspnœa may be noticed as a subjective symptom. In most cases this complication does not originate in the larynx, because a pronounced narrowing of the glottis but rarely arises in the course of the malady. Like cough, therefore, dyspnœa must be relegated to the troubles more intimately dependent on chest lesions.

The *objective* study of laryngeal phthisis having now to be considered, the general appearance of the patient will often be noticed as very suggestive of consumption. As he enters

3 Dissertatio de Phthisi Laryngea, Montpellier, 1790.
4 Recherches sur la Phthisie Laryngée, Paris, 1802.
5 Recherches sur la Phthisie, Paris, 1825, p. 51.
6 A traditional error has crept into some of our text-books respecting the views of Laennec on laryngeal phthisis. Ziemssen (Cyclopædia of Medicine, vol. vii., p. 834) has the following sentence: "As is well known, Laennec's teaching of the purely tubercular nature of laryngeal phthisis early met with opposition." Omitting the word "laryngeal," this statement would be correct. Laennec does not even mention laryngeal phthisis in his *magnum opus* (Traité de l'Auscultation médiate, &c., Paris, 1826), nor does he refer to it in any desultory paper.
7 Traité Pratique de la Phthisie Laryngée, Paris, 1837. 8 Ibid., p. 23.
9 Clinique Médicale, Paris, 1830, t. iv., p. 183.
10 Compendium de Médecine Pratique, Paris, 1836, etc., art. Larynx.
11 Dictionnaire de Médecine et de Chirurgie Pratiques, 1834, art. Laryngite.
12 Archives Générales de Médecine, Paris, 1839, t. v., p. 142.
13 Mémoire sur la Phthisie Laryngée, Paris, 1840, p. 20.
14 Handbuch der Pathologische Anatomie, Wien, 1846, Bd. v., p. 435.
15 Klinik der Krieslaufs und Athmungsorgane, Breslau, 1856, p. 388.
16 Die Chronische Kehlkopfkrankheiten, Berlin, 1866, p. 65.
17 Die Kehlkopfkrankheiten, Berlin, 1861, p. 261.
18 Vorlesungen über Geschwülste, Berlin, 1865, Bd. ii., p. 644.
19 In Krishaber, Dictionnaire des Sciences Médicales, Paris, 1868, art. Larynx, p. 672.
20 Die Kehlkopfswindsucht, Leipzig, 1879, p. 79.
21 Supplement to Ziemssen's Cyclopædia, New York, 1881, p. 235.
22 It is worthy of remark that aphonia, though meaning literally "no sound" and primitively speechlessness, is now practically applied to those who can speak only in a whisper. Thus Hippocrates remarks: "ὧν μεθύων ἐξαίφνης ἀφωνός τις γένηται, σταθεὶς ἀποθήσκει." Observationes, lib. 14, Schol. 33.
23 Studien und Beobachtungen über Stimmhandlähmung, Virchow's Archiv, 1863, Bd. xxvii., pp. 68, 296.
24 Op. cit., p. 186. 25 Op. cit., p. 653. 26 Op. cit., p. 35.

the practitioner's consulting-room his stooping attitude, his gait indicative of muscular enfeeblement, and the peculiar pallor of his countenance, are usually an instant revelation of the nature of the case, which is often further assured by the first tone of the patient's voice.

The laryngoscope being then called into use will complete the picture of disease, as far as it can be seen in the living subject. The appearance of the larynx differs not only according to the stage of the malady, but also with respect to its form. Two varieties of laryngeal phthisis are practically familiar to all workers with the laryngoscope.

1. The first presents itself as a congestion of the mucous membrane of the larynx, scarcely differing perceptibly from a case of subacute catarrh. It is, in fact, generally set down as such until its persistence and progress to considerable thickening, chiefly of the interarytenoid fold, together with the development of the tubercular cachexia, guide the observer to diagnose phthisis. In the beginning of this form the lung symptoms are always least appreciable, sometimes indeed difficult to be recognised with certainty. Many authorities, therefore, agree in calling it *primitive*.[27]

2. The second variety, less frequent, appears in many respects an antithesis to the first. It is denoted by a well marked anæmia of the larynx, succeeded in a few weeks, perhaps months, by a remarkable swelling of the tissues covering the cartilages of Wrisberg, and the arytenoid cartilages and of the interarytenoid fold. This tumefaction has a peculiar pale, smooth, and somewhat glistening appearance, suggestive of a passive œdema. It produces those pyriform swellings of the margin of the larynx, diminishing in extent from the arytenoid cartilages towards the epiglottis, sometimes unilateral, but mostly symmetrical, noticed by Mackenzie[28] and others as pathognomonic of laryngeal phthisis. Although this kind of tumour never exhibits a uniform congestion, it often shows hyperæmia of the inner parts in the form of a capillary injection or a punctiform redness. It may, however, be accompanied by congestion of other portions of the larynx. These are the cases corresponding to the "tubercular infiltration" of some laryngologists, and as the chest lesions are usually in an advanced state they are most patently *consecutive*.[29]

Whatever differences may be perceived in cases of laryngeal phthisis at the advent of the disease, in its later stages the condition is alike one of progressive ulceration. The ulcers, having once begun their task of destruction, almost invariably advance without cessation, and consume the tissues of the larynx by superficial and deep extension. Their floor is usually covered with an unhealthy pus, often streaked with blood, whilst their edges are irregular and frequently show an inflamed areola. At first, however, small ulcers of a lenticular shape are commonly observed, but these by their coalescence soon give rise to larger patches, which may present signs of their origin in having a festooned border. The ulceration attacks with nearly equal frequency the arytenoid cartilages, the ventricular bands, and the epiglottis. Türck,[30] indeed, considers that the first ulcers are situated on the posterior laryngeal wall, at the lower part of the interarytenoid fold, but under these circumstances it is very difficult to see them with the laryngoscope. The vocal bands participate early, and invariably in the morbid process, and become congested, swollen, and marked by small pink granulations; but ulcers, though always present, especially at the posterior part of the opposite edges, in the vicinity of the vocal processes, are scarcely so rapid and destructive as in the other localities.

Laryngoscopic inspection will generally reveal the cause of such subjective symptoms as emanate from the larynx. Difficulty in swallowing may thus be traced to swelling of the arytenoid cartilages and epiglottis, impeding the closure of that valve, and also, probably, to stiffening of the peri-laryngeal structures, by tumefaction or otherwise, hindering the necessary raising of the larynx by the elevators of that organ in the act of deglutition. On the other hand, pain in swallowing is indicated visibly by ulceration of the epiglottis, chiefly at the margins, and often by ulceration of the arytenoid cartilages, so disposed as to be brushed by the bolus of food in its descent. Entry of food into the larynx can be explained by imperfect closure of the organ by the epiglottis or the ventricular bands through hampered action or loss of substance of those parts. Interferences with phonation will be found to result from fixity of the vocal bands, caused by swelling of the adjacent tissues, by immobility of the crico-arytenoid joints, by actual paralysis of their motor nerves, or by mere muscular paresis. But in advanced stages, when the vocal bands are almost completely eaten away, the patient may produce crude vocal sounds in various peculiar and abnormal ways, such as by approximation of the ventricular bands, or even, as in a case noticed by Krishaber,[31] through a kind of glottis arising from an unnatural proximity of the epiglottis and arytenoid cartilages.

As regards expectoration, the bulk of it is furnished by the respiratory tract below the larynx. That which comes from the latter organ is peculiar in often containing fragments of ossified and necrosed cartilages; also straight elastic fibres which Rühle,[32] in contradistinction to the looped fibres of pulmonary sputa in phthisis, thinks can be recognised microscopically as proceeding from the vocal bands. Hunter[33] once saw the entire cricoid cartilage rejected. It is not uncommon for the larynx to be almost filled with frothy mucus, which renders laryngoscopic observation almost impracticable.

(To be concluded.)

[27] See Krishaber, op. cit., p. 660, Bœckel, Dictionnaire de Médecine et de Chirurgie Pratiques, t. xx., Paris, 1875. p. 258.
[28] Diseases of the Throat, &c., 1880, p. 372.
[29] See Bœckel, op. cit., Krishaber, op. cit.
[30] Klinik der Krankheiten des Kehlkopfes, Wien, 1866, p. 374, Taf. xvii., &c.

THE DISEASES OF MONKEYS.

By J. B. SUTTON,
SENIOR DEMONSTRATOR OF ANATOMY, ETC., MIDDLESEX HOSPITAL.

THERE is a notion prevalent, not only in the medical profession, but in the world at large, that monkeys kept in confinement in this country die chiefly from tubercle. I am not aware of any statistics or exact researches having been published on this subject before, but during the past eighteen months certain facts have come to my notice which seem of sufficient interest to be placed on record. In October, 1881, the Zoological Society very kindly permitted certain members of the Pathological Society to attend the post-mortem inspections of animals dying in their gardens in Regent's Park, consequently since that time I have had ample opportunity of making careful examination of the bodies of a very great variety of animals. Many and various have been the points of interest which have turned up in the course of the investigation, but none more interesting than those which relate to the diseases of the quadrumana. Previous to my attendance at the gardens it seems to have been the custom to use the word tubercle, or tuberculosis, in a generic sense, including under this term all such affections as pneumonia (lobar and lobular), empyema, abscess, caseous glands, and the like; hence, possibly, the origin of the error regarding the frequency of tuberculosis. From Dec. 1st, 1881, to March 30th, 1883, an interval of sixteen months, 110 quadrumana of various species died. Of this number I was able personally to examine the viscera of ninety-three. The causes of death were as follow:—

1. *Tubercle.*—This was the cause of death in three instances only. Two occurred in Rhesus monkeys from India, the third in a vervet monkey, also an Old World species. The disease was unmistakable: tubercular phthisis associated with cavities in the apices of the lungs, in every point resembling the condition met with in the human subject.

2. *Bronchitis.*—This proved fatal in twenty-two cases, in some being associated with emphysema, generally vesicular, but occasionally of the interlobular variety. Even a slight attack of bronchitis appears to be rapidly fatal.

3. *Pneumonia* in its lobar form is not so common; three deaths alone could be satisfactorily traced to this cause. The lobular form is frequent, seven deaths having been occasioned by it; three of the cases occurred in lemurs, in one instance being associated with hæmorrhagic cystitis, for which there was no obvious cause. Possibly the frequency of lobular pneumonia results from the prevalence of bronchitis.

4. *Empyema.*—This caused death in two cases. An abscess in the lung burst into a bronchus, filled up the trachea, and thus suffocated a baboon. A pretty specimen of squirrel monkey died from œdema of the lung.

[31] Op. cit., p. 653.
[32] Op. cit., p. 265.
[33] Cited by Monneret and Fleury, op. cit.

5. *Septic Pneumonia.*—A not uncommon mode of death in young animals is alveolar abscess, leading to ulceration and sloughing of the gum; the purulent discharges are inspired (possibly during sleep) and septic pneumonia established, sometimes leading on to gangrene of the lung. This proved fatal in a young chimpanzee.

6. A very unexpected cause of death manifested itself in bone disease, in the form of typical *rickets*, and a remarkable softening of bone having all the characters of mollities ossium, except that it occurs in young animals.[1] All the bones suffer, and the ribs become so soft that they yield to atmospheric pressure, giving rise to pulmonary collapse and death. Several instances of this disease have been shown at the Pathological Society during the past session, so that it is unnecessary to enter into details here. Three baboons and seven monkeys of different species succumbed to this curious affection.

7. *Scrofula* was well marked in three cases: the first, a baboon with caseating glands in the neck; the second, a small Capuchin monkey with suppurating glands in the axilla, posterior triangle, and groin; and, lastly, a Rhesus monkey with a caseating mass in the dorsal region, associated with spinal caries and paraplegia, death being eventually caused by meningitis, which extended upwards to the cranium. A large abscess had also formed behind the sternum, compressing the right lung and forming a bulging on the interior of the pericardium. This projection pressed on the auricle between the point of entrance of the superior and inferior venæ cavæ, and had given rise to a large and well marked milk-white patch as a result of pressure.

8. *Intussusception* of the jejunum killed a very fine specimen of lemur. One of these creatures also died from what appeared to be leucocythæmia. The spleen was enlarged fifty times above its normal bulk, and the liver was uniformly studded throughout with little white bodies composed of lymphoid tissue. The proportion of leucocytes in the blood was as one to eighty red corpuscles. This is interesting, inasmuch as these creatures come from Madagascar, an island famous for ague. Many lemurs also suffer from cataract. The reason is not very obvious. A caseating bronchial gland perforating the pericardium, thus setting up purulent pericarditis, proved fatal in another lemur.

It has been stated that one of the disadvantages resulting from the assumption of the erect posture by man is the occurrence of herniæ in both sexes, anteflexion and retroflexion of the uterus in females. I have a uterus taken from a baboon with acute retroflexion of the fundus associated with atrophy of its anterior wall. No history could be obtained as to whether she had borne young ones. Hydatids of the peritoneum were found in two instances, but were not the direct cause of death.

9. *Typhoid fever* proved fatal to three lemurs and one monkey. Two lemurs lived together in the same cage. The first one which died from this affection suffered from profuse diarrhœa, the ulcers being confined to the immediate neighbourhood of the ilio-cæcal valve; death resulted from perforation of the ileum. The second died seven days after its companion from severe hæmorrhage; ulceration of agminate and solitary glands had taken place from the commencement of the ileum to within half an inch of the anus. I think it very probable that the second lemur contracted the disease by direct inoculation from its mate, for the following reasons:—(*a*) The first animal which died was the one first affected, or at least was the one first noticed to be ill. (*b*) The fæcal discharges were so profuse that the keeper had difficulty in keeping the cage clean. (*c*) The companion lemur jumping about the cage not merely contaminated her own body, but occasionally dropped her food in the fæces, thus taking the morbid material into the alimentary canal in direct contact with the Peyerian glands. (*d*) The creature was not found to be ailing until some days after the first one was affected. (*e*) The unusual length of intestine found ulcerated also lends support to the notion of direct contagion.

The two remaining cases were very mild compared with the above. Arranged in a tabular form, the list reads thus:—Tubercle, 3 deaths; bronchitis, 22; lobar pneumonia, 3; lobular pneumonia, 7; septic pneumonia, 1; empyema, 2; abscess of lung, 1; œdema of lung, 1; atelectasis, 10; scrofula, 3; intussusception, 1; leucocythæmia, 1; typhoid fever, 4; the total being 59.

[1] It is very probable that mollities ossium is not confined to adults, but that a form of this singular disease attacks young subjects of the human species.

This list accounts for fifty-nine out of ninety-three deaths, leaving thirty-four unexplained. In these no lesion was met with sufficient to explain the deaths of the creatures. The species which give most trouble in this respect are the little marmosets and squirrel monkeys. Although I have inspected post mortem twenty-five of these creatures, in not more than two was it possible to assign a satisfactory cause of death. Some of them were said by the keeper to have died in a "fit," but careful examination of the nervous system failed to detect any abnormal condition.

Lastly, three points forcibly arrest the attention in glancing over the list:—1. The infrequency of tubercle. 2. The remarkable absence of tumours. 3. The absence of kidney disease of any description.

CLINICAL ILLUSTRATIONS OF PUERPERAL INSANITY.

BY A. CAMPBELL CLARK, M.B. ED.,
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(Concluded from page 181.)

SPACE will not permit of additional illustrations. Beside the foregoing I have placed notes of five other cases, and here in the form of a digest is submitted the gist of all of them. On first attack, one was aged eighteen; four, twenty-one to twenty-five; two, twenty-six to thirty; two, thirty-one to thirty-five. On second attack, one was aged twenty-two; four, twenty-eight; one, forty. Total fifteen.

Liability to recurrence was noticeable, but it did not always show itself in the puerperal form. One was insane before marriage, and became insane on birth of the first baby; five suffered twice from puerperal insanity; two cases have been under treatment (one insanity of lactation, and one due to exhaustion from pelvic disease), which at one time suffered from puerperal insanity.

Time of onset and form of attack:—(*a*) Within a week after labour in eleven cases; (*b*) within a fortnight in three cases; (*c*) one became insane "in the second or third month." Of the *a* group, two were in a state of stupor subsequent to mania, one suffered from melancholia, and eight were cases of mania; of *b* group, one was melancholia and two were mania; and the case in *c* group was one of melancholia.

Heredity and illegitimacy:—(*a*) These conditions were ascertained in three; but judging from various indications the proportion is greater. (*b*) Two (non-hereditary) were cases of illegitimacy and primiparæ.

Proportion of primiparæ to multiparæ:—In those insane for first time, multiparæ eight; primiparæ five.

Health during pregnancy preceding the attack:—(*a*) Mental: Decided depression in six; in one not ascertained. (*b*) Bodily: Two suffered from phthisis; one from heart disease; two from anæmia, result of abortion; two from severe headache (in one case combined with dyspepsia); four from "impaired health," the result in two of harassing social conditions (they were deserted by their husbands and left in very straitened circumstances). Twelve cases are thus accounted for. Of the remaining three information is defective regarding two, the third was in good health during pregnancy.

Nature of labour:—Natural in twelve; miscarriage in one; severe and prolonged, involving operative interference in two (in one of these the patient's health was good during pregnancy).

Lochia at or about the time of the onset of the mental attack:—Scanty or suppressed in ten; profuse and very offensive in two; not known in three.

State of the bowels at the time of the attack or soon after.—Costive or obstinately costive in eleven; diarrhœa in one; regular in two; unknown in one.

Milk at or about time of onset of mental attack:—Suppressed in twelve cases, plentiful in two, unknown in one case.

Urine:—Scanty in seven cases, natural in six, unknown in two. Albumen present in six cases, absent in six, unknown in three.

Inflammations:—Phthisical, two. Affecting uterus or its neighbourhood (*a*) serious, and with distinct septicæmia, four; (*b*) slight, with or without mild septicæmia, four.

Appetite:—Sometimes impaired at first, but in twelve was "all round" very good; in two impaired for many days; in one case unknown.

Body weight:—Much reduced in all except one (a case with hereditary history). A considerable increase was effected in all the cases recovered.

Pulse and temperature:—In six cases the pulse was under 100, in eight above it, in one unknown during the acute stage of her excitement. In seven cases the temperature was under 100°, in seven over it, and in one unknown. A high pulse and temperature accompanied the more serious complications.

Headache:—Occipital in three cases (two fatal, one melancholia), frontal in seven cases, general four, in one case unknown.

(*a*) Homicidal and (*b*) suicidal propensities:—(*a*) four, (*b*) five; both combined three.

Delusions:—(*a*) Of religious and depressing character, two; (*b*) of religious exalted character, three; (*c*) of general character coupled with exaltation, three; (*d*) of persecution by relatives or others, six; uncertain, one.

Delusions of identity in eleven cases, absent in the three melancholics, uncertain in one.

Hallucinations in fourteen, and probably in the fifteenth case; those of hearing and sight most frequent, but hallucinations of the other senses were not uncommon.

Sleep was absent or very slight for some days and nights after admission in twelve cases, fair in two, unknown in one.

Affections and suspicions:—The former blunted or perverted, the latter active in greater or less degree in almost every case. The husband was by many patients intensely hated, and he was suspected by them of unchaste conduct with other women. The children, though less uniformly disliked, were often ignored or threatened with violence.

Pyromania, "a morbid impulse to burn" (*vide* Bucknill and Tuke):—This symptom is perhaps so far unknown in the literature of puerperal insanity; but I have carefully investigated the cases, and ascertained beyond doubt its existence in nine of these patients. It was absent in the three cases of melancholia, and also in two others, and in one (the chronic case) we have no knowledge of its existence prior to her admission. In three cases the motive assigned was a "bad smell." Clothing and furniture were the articles usually burned. In seven cases hallucinations of smell were present. In some, however, we were led to assume a purely destructive impulse.

Additional features:—(*a*) Resemblance of some cases to delirium tremens. In some cases the observer was at times attracted by a resemblance in certain features to delirium tremens, by an expression of fear, a transient, or more persistent delirium, and the presence of hallucinations of sight and hearing, all combined in one individual; (*b*) profane and indecent speech and behaviour were by no means frequently noticed, in one only of the cases was this feature distinctly marked.

Indications for treatment were to a considerable degree afforded by the bodily health and condition. The state of the primæ viæ called for special attention in almost every patient; the condition of the uterus and adjoining tissues, together with the nature of the lochia, furnished many valuable indications, and the presence of lung disease or heart disease in four patients manifested another extension of the morbid area beyond cerebral limits and gave tangible ground for treatment.

Results:—Eleven cases have been treated to a termination; of these eight recovered and three died. One is hopelessly chronic, having been insane over twenty years. Three are still under treatment, but two are making very little progress towards recovery. Duration of asylum residence in those recovered averaged 152 days; maximum 359; minimum 52.

The following commentary refers to the cases of which a detailed description has been given:—

In reviewing the foregoing ten cases, and offering a commentary on them, I am constrained to follow one of two courses—viz., either to construct a definite clinical history of puerperal insanity as approximately as possible, or to deal only with the complications of the disease. The former course is inadmissible on the basis of a limited number of cases, and could scarcely lay claim to scientific value, unless the inquiry were pursued over a wider field. That being my ultimate purpose, the latter alternative will meanwhile suffice. The complications of puerperal insanity have, in the experience of Dr. Batty Tuke and others, proved excessively fatal, and their recognition at an early stage is therefore an imperative necessity. That they are not so frequently or so quickly recognised and attended to as they might be, is nothing wonderful, seeing that they are often eclipsed by mental symptoms of grave significance, and that their own symptoms are frequently masked or misleading. It goes without saying that the group here presented exhibits a darker colouring than is usually met with inside the same limited number of cases taken in chronological sequence. Puerperal insanity, as studied over a wider area, presents a much more hopeful picture; the proportion of recoveries is greater, the proportion of deaths less, and the complications relatively fewer and rarely so severe. But it is exceedingly probable that if the connexion between bodily and mental states were more carefully studied, we should find a large proportion of cases where complications, slight it may be, were coexistent with, if not antecedent to, the mental disease. Of this I am persuaded that an invariable physical examination, especially genito-urinary, is as essential as an abstract study of the mental phenomena.

The frequency of septicæmia is noticeable; and it may be suggestive, in view of the theories propounded as to the condition of the blood in puerperal insanity. The result in the cases of Mrs. Q——, Mrs. G——, and Mrs. B—— was decidedly gratifying. A sudden and rapid improvement came almost by crisis in the case of Mrs. Q——; the period of crisis being coincident with the formation of metastatic abscesses. Mental recovery has been more gradual in the other two cases; Mrs. G——'s mental health was restored *pari passu* with the elimination of the septicæmic poison. The complications in Mrs. B——'s case were of lesser gravity; and mental recovery might have been manifested earlier if the vigorous treatment of "shaving and blistering" had not been resorted to. It is of interest to observe the causal relation probably subsisting between the blistering and the conversion of the disease from acute maniacal excitement to obstinate melancholia. This one thing is certain, that the bodily health had nearly reached its normal standard before the mental disease showed signs of giving way.

The treatment of the septicæmic condition was easily determined in the case of Mrs. Q——, which afforded every facility for surgical interference. Here there were three good features: (*a*) An excellent digestion; (*b*) good staying power; (*c*) a septicæmia coming within the surgeon's province. To these and the use of blood enemata I mainly attribute the successful issue of the case. Mrs. A. R—— and Mrs. G—— were treated by vaginal injections, to which I attach great importance, by local applications (poulticing and blistering), and by constitutional remedies. The use of the carbolic spray in the case of Mrs. G—— was an experiment, the value of which I have not been able to determine. By enabling the patient to inhale carbolic acid and a purer atmosphere, I hoped to obviate in some degree the possibility of external aid being given to the septicæmic process. That our practice must be carried in the direction of germicide treatment is now matter of common agreement in the profession; but the precise nature of the specific treatment is the problem yet to be solved. In determining this, it is probable that a specific dietary may come to be an element worthy of consideration.

The value of enemata of defibrinated blood is not easily ascertained; and the cases here subjected to this treatment could scarcely be considered test cases, seeing that the gastro-intestinal digestion was fairly performed. My attention was directed to this method of alimentation by Dr. A. E. Sansom's communication on the subject;[1] and it appeared to me feasible that selected cases in asylums might be benefited by these enemata. Mrs. Q——, Mrs. G——, and Mrs. B—— were made subjects for the experiment, and the enemata were administered twice daily three or four times a week. The blood was retained for one hour or longer in all the cases; but the operation was at first repulsive to Mrs. B——, who for a time ejected the enemata; and a morphia suppository (quarter of a grain) was administered for a few days, until repugnance and irritability disappeared. I would hesitate to speak positively of the efficacy of this remedy had my observations been limited merely to these three cases; but several patients suffering from anæmia with amenorrhœa were subsequently treated in like manner, and soon there was apparent an improvement the degree of which varied in different cases. One of these patients stated, when recovered, that soon after receiving the blood injections a "thrill of new life" seemed to pervade her system. The matter is one well worth considering, and the plan

[1] Vide THE LANCET, vol. i., 1881.

deserves a fair trial. A more analytical study of the question is certainly necessary, and a form of administration less tedious and repulsive.

As regards Mrs. A. R—— and A. F——, the death of the former naturally gives rise to reflections, and I am inclined to believe that systematic treatment, with ergot from the first, might have been followed by a better result. In A. F——'s case local treatment was neglected, and this was certainly a mistake. At the same time they were both very unpromising cases from the first. The death of A. R——'s child favoured sleeplessness and acute excitement.

The frequency of pelvic and lung affections is striking, either or both appearing in a marked degree in six out of ten cases. At the present time, when the researches of Koch and others have widened our view of tubercular disease, the possibility of puerperal infection through pulmonary as well as genital channels is worth considering. In the case of Mrs. H—— tubercular disease had not proceeded beyond the larynx till after the birth of her child; and in A. F—— the phthisical process was slow till after parturition. A breach of continuity and a pabulum were not wanting in either case.

The temperature charts presented a variety, apparently irreconcilable; but a brief study sufficed to discriminate four types—viz., (*a*) a moderate and uniform increase, as shown in the uncomplicated cases, and in Mrs. B—— after the acute symptoms had subsided; (*b*) a periodicity of increase and decrease—e.g., Mrs. Q—— and Mrs. G—— (recovered cases of septicæmia); (*c*) a uniformly high evening temperature with well-marked morning remissions in the two phthisical cases; (*d*) a persistent high temperature pursuing an erratic course in the fatal case of septicæmia. While these general features are sufficiently distinct for purposes of identification, they are not a sufficient measure of the gravity of the respective types as judged from a thermometric point of view. To gauge this gravity with greater precision we must ascertain the average morning and evening temperatures during the acute stage of the disease. Seeing that "it is the pace that kills," we are led to inquire which of these cases exhibited *in toto* the highest temperatures, and the result of this inquiry is here tabulated:—

		Average morn. temp.		Average even. temp.		Average total.
Type (*a*),	Mrs. E. R. .	98·3°	...	98·3°	...	98·3°
Type (*b*),	Mrs. Q. . .	99·3	...	100·3	...	99·8
,,	Mrs. G. . .	100·8	...	102·2	...	101·5
Type (*c*),	A. F. . . .	101·45	...	102·8	...	102·12
,,	Mrs. H. . .	101·0	...	103·5	...	102·25
Type (*d*),	Mrs. A. R. .	101·9	...	103·1	...	102·5

A significant addendum to the above statement is, that the cases of *c* and *d* types died. A question will naturally arise—viz., How far had antipyretics altered the temperature charts? In one word, it may be said that quinine in large doses reduced the temperature only for a brief time, and that it was chiefly employed thus, and only for a day or two, in the most severe cases—those of *c* and *d* types. In small doses (three grains), frequently repeated for days, I have found it suit best. The pulse, as an indication for prognosis, appears to correspond with the temperature, so far as these cases are concerned.

The length of this paper forbids further remark. I conclude by restating my conviction that the collective evidence of obstetricians is greatly needed, and will do much to advance our knowledge of puerperal insanity.

CASE OF LITHOTRITY AT ONE SITTING.

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WERE it not that the operation of lithotrity at one sitting as introduced by Bigelow is still *sub judice*, I should feel it necessary to apologise in bringing forward one example; but the divided opinion of many eminent surgeons on the subject induces me to send notes of the following case:—

B. B——, aged sixty, but who looked ten years older, consulted me concerning bladder symptoms which had existed for two years and a half, and had lately given him such distress that he had been unable to perform his duties as a gardener. There were the ordinary symptoms of calculus, and on sounding a hard stone could be felt which measured more than an inch in length. The urine contained a little pus and some blood, but no casts. He presented a distressed and haggard appearance, as if pulled down by suffering.

On Sept. 30th, 1881, ether was administered, and an ordinary catheter introduced to draw off the urine. After three ounces of water had been injected into the bladder an ordinary Thompson's fenestrated lithotrite was passed, and at the first attempt grasped a stone an inch and a half in length, which soon yielded with a very audible snap. After all the fragments had apparently been crushed, the largest Bigelow's curved catheter was introduced without difficulty, and the bladder thoroughly washed out, much débris coming away in small fragments, but scarcely a tinge of blood was visible in the water used in the washing. Some fragments being apparently yet too large for the catheter, a second and third crushing and washing were effected, leaving the bladder apparently clear. The whole operation occupied three-quarters of an hour. The patient passed water the same night, but, beyond a feeling of soreness, complained of no pain. On the second and third day he had a frequent desire to micturate, and had a temperature of 101°. The bladder was twice syringed out through a soft catheter with a 1 in 150 carbolic solution, giving him great relief. For a few days there was some amount of mucus in the urine and a little fine sand; but at the end of ten days he passed water only thrice daily, and the urine was quite clear and free from mucus. At the end of a fortnight he walked three miles, and reported himself quite well. It is now two years since the operation, and he has had no relapse.

We owe this operation, first, to Dr. Otis, who demonstrated the capacity of the male urethra; and, secondly, to Dr. Bigelow, who, applying this fact to practice, also tacked on to it the principle that the bladder, if carefully used, is very tolerant of operative procedures, especially if at the end of the operation it be left free from the mechanical irritation of sharp fragments of stone. Of the value of Bigelow's operation over the lithotrity of the last twenty years, I think no one can have any doubt; and one cannot help feeling that lithotomy, except in children, will in the future be one of the rarest of operations.

Leeds.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nullaautem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

DISTENSION OF FRONTAL SINUS; INCISION; DRAINAGE; CURE.

(Under the care of Mr. BRYANT.)

FOR the notes of the following case we are indebted to Mr. Linnell.

Eleanor P——, aged twenty-three, was admitted on Jan. 13th, 1882, into Lydia ward. She had always been weak, and always irregular in her menses. In childhood she had measles and small-pox. She had been in the hospital under the care of Mr. Forster for diseased bone in the foot six years ago. Mr. Forster excised the ankle, and afterwards amputated the leg. The stump never really healed, and about three or four years ago she knocked the stump and the skin gave way, so that the bone became exposed and remained so.

On admission, the patient looked fairly healthy. The stump was conical, and fairly riddled with shallow sinuses, and was scattered over with patches of dried serum. There was considerable pain. At the inner corner of the right eye was a bilobed swelling, first noticed five years and a quarter ago. The swelling was painful, and the pain increased when hot fomentations were applied. After its first appearance it had more than once disappeared, and had not generally given any pain until a fortnight ago, when the external lobe

showed itself for the first time. The skin over the second lobe was of a reddish-yellow colour, tender, and very sensitive. The lobe did not diminish on pressure, nor did it apparently infiltrate the skin. There was fluctuation between the two lobes. There was no epiphora.

On Jan. 27th an oblique incision was made over the orbital tumour, when a semi-purulent sanious discharge escaped. A ridge of bone was felt leading into a cavity, which proved to be the frontal cell. A spiculum of bone was removed with the bone forceps and a chisel, and a drainage-tube was passed from the cavity down the lacrymal duct into the nasal cavity and through the nostril. The angular artery was twisted. The cavity was next syringed out with iodine water, when a thick clotted purulent discharge escaped. This fluid was rather glutinous; it contained some columnar ciliated cells looking quite fresh, but the contents were chiefly degenerating pus cells and débris, and many large granular mucous corpuscles. The edges of the wound were stitched together with carbolised catgut.

Feb. 15th.—Wound healed. There is still fulness internal to the line of incision, and upon squeezing something was felt to flow into the nose. There was no epiphora. The movements of the eyeball were good.

On Feb. 27th she was discharged convalescent.

On June 1st, 1882, she reappeared in the ward, when the orbit was natural, the sinus having closed.

This case had very much the appearance of an orbital exostosis, and its true relation was not recognised until a free incision had been made down to the bone. In the last vol. (xxv.) of the Guy's Hospital Reports Mr. Higgens has published some cases of the same kind.

MONTGOMERYSHIRE INFIRMARY.

CASE OF PAROTITIS FOLLOWED BY ORCHITIS AND MENINGITIS; HIGH TEMPERATURE; RECOVERY.

(Under the care of Mr. MONRO.)

FOR the following notes we are indebted to Mr. G. H. Healy, house-surgeon.

W. B——, a lad of fifteen years, of considerable aptitude for mathematics and other brain work, and of nervous temperament, was admitted on August 2nd, 1882. Previous to admission he had had an attack of mumps, from which he had apparently recovered, but upon returning from a short walk he felt much depressed and feverish, had a rigor and was obliged to take to his bed. The temperature next morning was 101·2°, with slight frontal headache, brown tongue, hot dry skin, and hard rapid pulse, but no vomiting. Temperature in the afternoon 105°, rising in the evening to 106°, with low muttering delirium and tenderness of scrotum. A saline mixture and a purgative were given.

On Aug. 4th the temperature remained the same. There was impaired resonance of the base of the right lung. The scrotum was much swollen, and very painful, the delirium continuing and increasing towards night. Aconite in small doses was added to the mixture, and cold was applied to the head. The scrotum was poulticed and supported.—5th: Temperature, morning 106° evening 107·2°. Pupils much dilated and insensible to light; increased delirium; patient very restless, rolling his head from side to side; bowels costive. Wet sheet packing was applied, which had the effect of lowering the temperature to 105°; and a purgative enema was given, which did not act. The orchitis appeared to be subsiding.—6th: Temperature, morning 105·4°, evening 106°. The patient had violent delirium towards evening with muscular twitchings on the left side. His head was shaved and blistered, and, as the bowels had not acted, he was given croton oil, and at night a dose of bromide of potassium, and had ice applied to the head.—7th: Temperature, morning 105°, evening 105·4°. Delirium was very wild and maniacal. He was given bromide of potassium every three hours with henbane. The bowels not having acted, an enema was given, and the patient passed some very hard, dark, and offensive stools. Six leeches were applied to the temples.—8th: Temperature, morning 105°, evening 105·4°; the pulse thready and fluttering and tache cérébrale well marked. The patient was in an extremely prostrate condition, had apparent difficulty of deglutition, and would not try to take his medicine, getting very excited at the sight of it. Subsequently coma set in. Nutrient enemata were given of essence of beef, eggs, and brandy in small quantities. Sinapisms were applied to the back of the neck, the cardiac regions, and the calves of the legs. He was very restless during the night, but improved somewhat towards morning, but slept very little.—9th: The temperature fell to 103°, but the delirium became extreme, patient requiring several people to keep him in bed. He was able, however, at times to recognise faces, and expressed great aversion to some; made violent efforts to bite the hands of those holding him, and was most impatient of the restraint placed upon him, begging to be let loose and asking the attendants to put their fingers in his mouth that he might, as he said, show that he did not intend mischief. He could not swallow, and shouted at the top of his voice when asked to try to doze. The pulse was hardly perceptible after these paroxysms and prostration very great. Nutrient enemata were with difficulty continued. The head was again blistered and ice subsequently applied. The orchitis had disappeared.—10th: Temperature morning and evening, 102°. The patient having passed a wretched night was calmer in the morning, and took nourishment in small quantities when pressed. Essence of beef and iced champagne were given by the mouth. The pulse became stronger subsequently. The bowels being obstinate, olive-oil enemata were given, which acted but caused considerable pain, the fæces being very hard and requiring mechanical removal.—11th: The patient had passed a better night with but little delirium. He was quite sensible, and took nourishment well, and generally had much improved. Pulse better, and temperature nearly normal.

From this time the patient continued to improve daily, the head symptoms disappearing gradually, but he continued for some days in an extremely prostrate condition, and required great care in nursing. In a fortnight, however, he was able to get up, and although he still had a weak pulse and considerable dilatation of the pupils, he had otherwise much improved, could assimilate plenty of nourishment, and, in consequence, with tonics and iron with strychnia in small doses, he was in a condition to be discharged shortly afterwards.

The patient has been under observation since his discharge, now more than six months ago. He suffered for a considerable time from difficulty in walking, his gait being unsteady and incoördinate; as also in speaking, making impulsive efforts to utter his sentences as quickly as possible, with incomplete enunciation of the words. He had also marked agraphia. His pupils continued to be dilated, and mentally he was subject to much excitement when spoken to. The electric current was used to the muscles of the throat, and phosphorus, valerianate of zinc, iron, quinine, extract of malt, and cod liver oil were prescribed. At the present time he is almost as well as before his illness, and gains rapidly in physique.

It may be remarked that the temperature in this case was higher than is usual in meningitis. There was also little headache and an absence of vomiting. Yet the symptoms generally pointed to metastatic meningitis which occasionally, though not much referred to in standard medical works, follows parotitis. It is also worthy of note that it did so in the case of a boy of more than ordinary mental activity and excitability, which possibly may have had something to do with its occurrence. The patient's brother had an attack of mumps at the same time without a bad symptom.

STANLEY HOSPITAL, LIVERPOOL.

CASE OF CARBOLIC ACID POISONING.

(Under the care of Dr. COSTINE.)

FOR the following notes we are indebted to Mr. E. R. Williams, M.R.C.S., junior house-surgeon:—

E. H——, a young girl of seventeen, was admitted on the 21st ult., having, it was stated, two or three hours previously taken poison, the nature of which, in spite of several awkward and futile attempts at its pronunciation, it was impossible to learn. Her condition was one of extreme danger. She was completely anæsthetic, her muscles relaxed, eyelids closed, pupils dilated and inactive, skin cold and clammy with large drops of perspiration like beads running down the cheeks, temperature manifestly lowered, respiration feeble and shallow, the pulse at the wrist imperceptible, and the action of the heart feeble and intermittent. From this extreme state of collapse, by means of subcutaneous injections of ether, galvanism, &c., she gradually recovered. Careful examination of the dress, hands, lips,

breath, mouth, and fauces revealing nothing as to the nature of the poison, it was deemed advisable to give her one-eighth of a grain of apomorphia subcutaneously. In fifteen minutes she expelled with a gush about five ounces of a dark-coloured liquid, smelling strongly of carbolic acid. Having now ascertained what the poison was, the stomach-pump was used and some olive oil injected. This she soon vomited, together with a little more of the same dark-coloured fluid. The urine passed was of a dark-brown colour and gave the usual tests for carbolic acid. The fæces were also of a dark colour. With the exception of some soreness of the mouth and throat, together with a little pain in the epigastrium, all of which were relieved by appropriate medicines, she recovered without a bad symptom, and on the fifth day after admission was discharged. To complete the history of the case, it may be added that having had a quarrel with her lover she determined to destroy herself, and with that intention took a pennyworth, about one ounce and a half, of the common crude carbolic acid.

CASHEL UNION HOSPITAL.

NECROSIS OF SKULL FROM TERTIARY SYPHILIS.

(Under the care of Dr. LAFFAN.)

THE subjoined case possesses some interest from the guarded prognosis which it suggests in cases of syphilis, and from the obvious failure of mercury to prevent the worst manifestations of the disorder years after the original disease was contracted.

D. C——, a smith by trade, aged thirty-four, was admitted in March, 1878, with an abscess in the right ankle. He contracted syphilis in 1871, for which he was mercurialised. In 1875 syphilis attacked him again, for which he was treated with mercurial fumigations. There was some history of scrofula, but not a very clear one. He got occasional rigors when the weather changed, and these continued; They were accompanied by sleepiness and loss of appetite. pulse 160; tongue brown and dry; head hot, but without pain; pupils contracting and sensible to light; noise in the ears.

July 29th, 1882.—A round piece of frontal bone exposed and necrosed over right eye, bone also exposed over left eye, with pus flowing freely from both places; sight unaffected; taste on tongue; occasional vomiting; some stupor present, which is more marked from time to time; some injection of conjunctiva. A marked rigor assailed him this day week and continued on and off up to the present. He had a horrible fetor from the breath, which continued to the end.

Aug. 5th: Temperature 96°; pulse 112; respiration 40. Bowels moved four times; the patient's sputum is of a bloody colour. He is perspiring a great deal; appetite very bad; appearance dull and wasted. He had a rigor at 8.30 P.M. yesterday; and a large swelling was observed on the top of his head, which broke and discharged a great quantity of fetid pus.—6th: Pulse 112; respiration 40; temperature 102°. He perspired a good deal; the bowels moved three times; he slept very little; appetite bad.—7th: The patient has had no sleep, took his drinks. Was restless for some hours before death, and had three motions of the bowels.

The purulent discharge continued to flow freely till about three hours before death, and was intermixed with a little blood. The stupor or hebetude went on till half an hour before death. This hebetude, which had gone on increasing from the commencement of the attack, was at no time so deep but that when at its worst he could reply consciously to questions. There was no local paralysis except a slight one of the face, the muscles being drawn to the right side. Two days before death there was a little delirium. Half an hour before death he asked for a drink. He died comatose on August 12th.

HOSPITAL SATURDAY FUND.—The collection for this fund is fixed for the 1st prox. Arrangements are being perfected with a view to securing a greater street collection on behalf of this fund than has hitherto been realised. Collecting sheets to the number of 30,000 have been issued to the various workshops of the metropolis, and to police, postal, railway, and other officials, and boxes will be placed on board all the Thames ferry boats, and will be under the especial charge of the captains.

ACADEMY OF MEDICINE IN IRELAND.

THE Pathological Section met on April 6th.

Specimens Exhibited by Card.—Mr. P. S. ABRAHAM: Colloid-like bodies in the Medulla and Cerebellum from a case of Diabetes. Surgeon-Major HAMILTON: Three specimens of Typhoid Lesions; ulcers in the ileum. Mr. THOMSON: Multiple Fractures of the Lower Jaw. Dr. WALTER SMITH: Abdominal Aneurism. Dr. PURSER: Atheroma of Aorta, Endarteritis Deformans. Mr. J. DAVISON and Mr. P. S. ABRAHAM: Bones of young lower Animals after Fracture, showing increase in size. Dr. J. M. REDMOND: Spontaneous Aneurism of the Brachial Artery; heart showing deposit on aortic valves.

Mr. JOHN B. STORY exhibited a young man, aged twenty-one, suffering from Hemiatrophia Facialis upon the right side. The patient's mother stated that the defect was congenital, and had been caused by a fright early in her pregnancy from a guinea-pig being thrust into her face. In favour of this theory there was an undoubtedly congenital deformity of the right auricle upon the same side. In the atrophy all the tissues, skin, muscle, and bones were involved, the skin atrophy being best marked over the eyebrow, and of the bones the superior and inferior maxilla were mostly implicated.—Dr. M'SWINEY asked whether the man was idiotic, or whether he had been delivered at his birth with forceps.—Mr. STORY replied in the negative to both questions.

Dr. WALTER SMITH exhibited an Abdominal Aneurism taken from a man aged thirty-eight years, who died on the 10th ult. The immediate cause of death was an acute pleuro-pneumonia on the right side. The aneurismal symptoms first declared themselves about two years and three months before his death by pains in the back, which gradually increased in severity until he was obliged to give up work and seek admission into the hospital. Below the ensiform cartilage could be seen and felt a tremulous pulsation, attended with a loud systolic murmur, audible as low as the umbilicus, and posteriorly along the spine from the eighth dorsal to the second lumbar vertebra. In December last an eccentric impulse was detected under the twelfth rib on the left side; and about the middle of February he was seized with intense pain in the right hip, thigh, and leg; and from this date he rapidly sank. The autopsy showed that the right lung was consolidated; weight 3 lb. 10 oz.; abundant flaky lymph on pleura. The left lung was healthy; weight 1 lb. 12 oz. A large saccular aneurism sprang immediately below the diaphragm, and extended to within an inch of the bifurcation of the aorta, and laterally from one kidney to the other. There was extensive erosion of the eleventh and twelfth dorsal vertebræ and first lumbar vertebra; eleventh and twelfth ribs on left side were detached from the spine and adherent to the sac. The abdominal viscera were healthy.—Dr. A. KENNEDY remarked on the exceptional mode of death in this case, and discussed the diagnosis of aneurism of the abdominal aorta and cancer; and Dr. SMITH replied.

Mr. CORLEY read a paper on the disease to which Tilbury Fox applied the name "dysidrosis," and which Mr. Jonathan Hutchinson termed "cheiro-pompholyx." He detailed the history of two cases, both following injury of the median nerve, and in one of which, after the eruption had disappeared from the hand of the injured side, a similar eruption broke out on the other hand. This, he considered, indicated that the irritation produced in the member first affected was propagated to the spinal cord, and produced there a nervous disturbance which passed across and down the nerves of the opposite limb. From the consideration of these cases, as well as those detailed by Hutchinson and Fox, Mr. Corley was of opinion that the disease was genuine herpes zoster of the hand, due to either centric nervous disturbance or irritation of nerve-trunks; and he therefore rejected the name and pathology suggested by Tilbury Fox.—Dr. WALTER SMITH discussed this communication, and illustrated his remarks by the facts of a case recently observed by himself; and Mr. CORLEY replied.

Dr. PURSER showed an example of Extensive Atheroma of the Branches of the Pulmonary Artery. The primary trunk was free from disease, but the smaller divisions of the vessel were much affected; the aorta was healthy; the right ventricle was greatly hypertrophied, without much dilatation. There was chronic pneumonia of both lungs. The patient was a middle-aged woman, who died almost immediately after her admission into hospital, before any history could be obtained.

Reviews and Notices of Books.

Leçons Cliniques sur les Maladies Mentales et sur les Maladies Nerveuses. Par AUGUSTE VOISIN. Paris: Baillière et Fils.

THIS is a huge volume of 800 pages, which, probably with advantage to author and reader, might have been condensed into a much smaller compass; the present bulk, however, has the advantage of demonstrating more fully the author's facility in generalising. Praise must be accorded to the systematic method in which the subjects are treated, and to the author's constant endeavour to associate cerebral pathology with mental symptoms. In places, however, the former merit degenerates into a fault, and becomes a mere hair-splitting subdivision. The theme of the work would appear to be the great therapeutic success of the author in the use of counter-irritation, morphia, and the bromides, together with his pathological success in discovering microscopic changes which correspond most accurately with the present accepted theories of brain function and the author's views of cerebral disease.

Counter-irritation by blisters or actual cautery is recommended in general paralysis with mania, whenever the cerebral temperature rises above the normal. In ordinary mania with cerebral hyperthermia, blisters should be used to the head and neck, with a sufficiently powerful injection of morphia to produce prolonged sleep. In ordinary melancholia, where there is temporary or chronic cerebral hyperthermia, the same treatment should be adopted; and so also in the case of stupor, but if the stupor be without elevation of head temperature morphia should be used. Morphia is recommended to be employed in the form of hydrochlorate as a subcutaneous injection in stupor, in simple hypochondriacal and hysterical melancholia, in mania, and in sensory hallucinations; the doses varying from 3 to 5 centigrammes per day in simple melancholia, to 9 or 10 in stupor, and from 40 to 60 in circular insanity. The initial dose in all cases should be from 1 to 3 centigrammes.

Of 106 epileptics treated by bromides, 37 were cured and 37 were so much improved that many had no longer fits, but only auras and vertigos. The dose is regulated so as to suppress the reflex irritability of the epiglottis, and varies from 50 centigrammes to 12 grammes daily. The success of this treatment is certainly astonishing. The pathological success may be estimated by the fact that in simple mania the changes under two months of diseased condition are differentiated from those above that period; in these last three stages of brain-cell degeneration are described. In the first stage, amongst other changes, the protoplasm of the cell becomes fatty and pigmented; in the second, the protoplasm commences to be absorbed, is more granular and opaque, the axis cylinder becomes atrophied; in the third, the protoplasm has disappeared, the contour of the nucleus is that of the cell, the axis cylinder is disconnected, and the secondary prolongations have disappeared.

A large portion of the work is devoted to showing that general paralysis may be associated with every form of melancholia—a fact already well recognised; and much space is also devoted to proving the long accepted conclusion that the enfeeblement of mental powers exists from the outset of, and is an important diagnostic symptom in, general paralysis. The perusal of this work cannot but excite the desire of many alienists to rival Dr. Voison in his therapeutical triumphs; yet before adopting his modes of treatment, favourable as they appear, it might be wise to compare the total statistics of the Salpétrière with those of similar French or English institutions. The difference should be so well marked as to convince the most sceptical therapeutist.

OUR LIBRARY TABLE.

Insanity; its Causes, Prevention, and Treatment. By W. HARRIS, M.R.C.P. Edin. London: Wyman and Sons.—This is a sketch of the subjects indicated in the title, and is intended for popular reading. The medicinal treatment does not seem a fit matter for popular treatment, and the causes and prevention of insanity are so faintly dealt with that it is to be feared the object intended will not be greatly advantaged. The author does not diverge from the accepted views on these matters.

Archiv für Anatomie und Physiologie. (His, Braun, und Du Bois Reymond.) Physiologische Abtheilung. Heft ii. und iii.—This part contains—1. Ernst V. Fleisch: Das Chronautographium. 2. Ferd. Klug. Ueber den Einfluss der Kohlensäure und des Sauerstoffs auf die Function des Säugethierherzens. 3. A. Canini: Die Endigungen der Nerven in der Haut des Froschlarvenschwanzes. 4. Ad. Zuderbaum Nervendehnung und Nervendruck. 5. Wilhelm Fleiss: Das Piperidin als Anæstheticum und der Beziehung desselben zu seinem Homologon, Coniin. 6. S. Meltzer: Die Irradiationen des Schluck Centrum und ihre allgemeine Bedeutung. 7. Babuchin: Zwei Begründung des Satzes von der Præformaten der Elecktrischen Elemente im Organ der Zitterfische.

Zeitschrift für Biologie. Von W. KUHNE und C. VOIT. B. xix. Heft 2.—This part contains the following articles:—(1) Ueber die nächsten Spaltungsproducte der Eiweiss Körper, by v. Kühne and Dr. R. H. Chittenden; (2) Ueber Hemialbumen im Harn, by v. Kühne; (3) Die Gase des Verdauung-schlauche der Pflanzenfresser, by Professor D. Tappeiner; (4) Versuche über die Raumsinn der Haut nach der Methode der richtigen und falschen Fälle, by Dr. W. Camerer; and (5) Einfluss des Bromkalium auf den Stoffwechsel, by Dr. B. Schulze.

Journal de l'Anatomie et de la Physiologie. Par C. ROBIN et G. POUCHET. T. xix. No. 3. Mai et Juin.—The whole of this part is occupied with a memoir by L. Huet on the Isopod Crustaceans. There are several plates giving illustrations of their internal structure.

The Hygiene of Armies in the Field. By ROBERT RAWLINSON, C.B. Read at the Parkes Museum, June, 1883. London: Wyman and Sons. 1883.—This paper, which was read at one of the evening meetings at the above museum, is more an account of the author's experience as the engineer member of the Sanitary Commission sent out to the army of the Crimea in the spring of 1855, than a sketch of the hygiene of armies in the field. It is an interesting record of sanitary work performed, and from this point of view may furnish practical hints for the arrangements which may be advantageously made for the carrying out of sanitation with an army on active service. The Appendix contains extracts from the Report by the United States Sanitary Commission of its work during the war of the Rebellion, and from Kinglake's "Invasion of the Crimea." The omission of the latter would not have affected the value of Mr. Rawlinson's paper.

Æsthetical Sanitation. By WILLIAM WHITE, F.S.A., M.S.I., F.R.I.B.A., &c. London: E. Stanford, Charing-cross.—"Be healthy, and only thus you will be beautiful," is the excellent lesson contained in this little book; but so many have gone before the author in decrying tight lacing, tight clothing, and tight shoeing, and in advocating exercise of the whole frame, that he must be sanguine if he hopes that fashion will recognise his claims to be heard. A fuller account would have been useful and interesting of Colonel Ling and his grand central institution at Stockholm for the "wonderful system by which more than five hundred muscles of the human body, together with very many thousands of nerves, are thoroughly and equally exercised and trained." In this connexion few perhaps are aware of the value of cricket but those who have played an all-round game after

long disuse, and have found out painfully the next day how many neglected muscles have been brought into play. Of the lessons of this book we can say nothing but good; it is only their enforcement which is wanting.

Knapsack Handbook, or Pedestrian's Guide. By WILLIAM WHITE, A.C., F.S.A., &c. Second Edition. London: Edward Stanford, Charing-cross. — This pamphlet, by a member of the Alpine Club, contains in a handy form lists for the use of the ordinary knapsack tourist, showing what he should wear and what he should carry, together with much short and sensible advice. The knapsack itself is not discussed, as it is taken for granted that an invention of the author's, called the "porte-knapsack," will be used, which remedies "all drag on the arms and all pressure on the breast or between the shoulders." But from beginning to end the pamphlet is the work of a man who has learned by experience what he wants himself, and the price is a small one to pay even for the grateful security from finding that one has "left something behind."

Health Lectures for the People. Delivered in Manchester, 1882-3. Vol. vi. Manchester: Heywood. 1883.—This is the sixth course of lectures published by the Manchester and Salford Sanitary Association. The subjects treated were those relating to "The Home and the Household in their Sanitary Aspects." We are disposed to think that some of the lectures are not well adapted for the class for whose instruction, it is to be presumed, they were chiefly intended, but others are very practical, plain, and instructive. Those by Dr. Ransome, "On Some Dangers connected with Dwellings, and how to avoid them"; by Dr. Leech, "On Personal Care of Health"; by Mr. Reynolds' "On Thrift, its bearing on Health and Disease"; and by Dr. Simpson, "On Cookery for the Household," appear well adapted to promote the objects of the Association, and to point out to heads of families how they may most effectually care for the health of those in whom they are interested, and for whose well-being they are responsible.

Smoky Chimneys: their Cause, Prevention, and Cures. (Illustrated.) By Captain JAMES T. JOHNSTON, R.E. pp. 16. Plymouth: Bowering and Co. 1883.—There are few greater domestic nuisances than a smoky chimney. This pamphlet has been written by an officer who has evidently studied and understands the subject, in the hope that it may be useful in helping the afflicted householder effectually to remedy the evil. We are not so sanguine as to believe that all smoky chimneys can be cured unless by pulling down and rebuilding; but we know from personal experience that much may be done by a careful study of the causes, and the adoption of the appropriate remedies. These are well pointed out in the pamphlet, which we recommend to all who are suffering from the nuisance. It has the great merits of being short, clear, easily understood, and practical.

"PROBABLE CHOLERA CENTRES IN LONDON."

To the Editor of THE LANCET.

SIR,—Your sanitary commissioner will no doubt be glad to learn that before his visit to Wickham-place the matter had been reported to the vestry on July 17th, and the necessary notices had been prepared and probably served. I should be glad indeed if he could relieve me of a burden which has been too heavy for my shoulders ever since my appointment. Medical officers of health and inspectors of nuisances cannot be everywhere in their districts at the same time. A court is dealt with, every house is visited, every nuisance removed, every sanitary requirement complied with after a fashion; but in many cases the tenants are debased to the lowest level, the landlords plausible when it suits their purpose, defiant when pushed to extremities, shifty when before the magistrate. Neither class will give the least assistance to the inspector, who, perhaps, has to call in the aid of the police when he goes to visit the neighbourhood. If a couple of months be allowed to pass while necessary work is being done in some other part of the district, all that was done is undone; the houses are once more dirty, the taps and supply pipes stolen, the closets without water, the yards foul and fetid. The medical officer would gladly have such an area cleared, but he cannot say the houses are unfit for human habitation, they are only neglected—neglected alike by tenants, landlords, visitors. No complaint ever reaches him; no one stirs hand or foot to help. The inspector alone, with the medical officer, ever attempts to do anything for the neglected and degraded outcasts. And here I must say that your commissioner has done me personally but scant justice in his report. One would imagine that *he* had suggested that the neighbourhood of Turk's-row should be dealt with as an area capable of improvement. Surely I am not dreaming in fancying that I mentioned to him the circumstance that this area had been reported to the Metropolitan Board. They did not entertain the question, on the ground, as I was informed, that the property would soon pass into the possession of the ground landlord, who meant to undertake a scheme of improvement embracing the entire neighbourhood.

There are very probably other courts and alleys in Chelsea that stand in need at this moment of a visit from the inspector. It is unnecessary here to go into detail of what is done from day to day. I will only say that the vestry is fully prepared to deal with cholera in the same liberal manner in which it was dealt with during the last visitation. But there is one question which has often presented itself to my mind—viz., how far a medical officer of health would be justified in demanding what we all know to be desirable, that no cistern used for domestic purposes should have any connexion with a w.c. Will the law be on his side if he prosecute a landlord for having only one cistern in a cottage with, perhaps, only one family? If so, will it justify him in prosecuting the owners of houses in Grosvenor-square? I am afraid that I ought to offer some apology to your commissioner when I tell you that at the very time he was waiting for me, I was arranging for the first steps being taken which may lead to the question being tried before a police-magistrate. I am sure that the gain of a favourable decision would be incalculable; and it seems to me that the present opportunity ought not to be lost. Everyone admits the agency of foul drinking-water in the propagation of cholera, and none can deny the frightful mortality of that disease.

I shall be very glad when your sanitary commissioner can find time to visit any other courts in Chelsea, and will give me the benefit of the information he obtains, even though it be at the expense of a graphic description in THE LANCET. Perhaps in doing so he would kindly abstain from finding fault with a vestry extremely anxious to do what is right as the sanitary authority. Its members are not omniscient, nor am I.

I remain, Sir, yours faithfully,

A. W. BARCLAY,
Aug. 1883. Medical Officer of Health.

*** We are glad to note that since the publication of our report on Probable Cholera Centres, the authorities of Chelsea parish have distributed a circular to the tenants of the upper and middle class dwellings in that borough, calling attention to drainage and water-supply. This circular states that there should be no communication whatsoever between cisterns used for domestic purposes and the house-drains. This is an indisputable principle of good sanitation, but it is a principle that is rarely carried out, and some legal means must be found to enforce the doctrine. We trust the parish of Chelsea will, as intimated in Dr. Barclay's letter, raise a test case, and fight the matter out successfully.—ED. L.

ROYAL RED CROSS.—The "Gazette" of the 14th inst. announces that the Queen has been graciously pleased to confer the decoration of the Royal Red Cross upon the undermentioned nursing sisters, under the provisions of Her Majesty's warrant, dated April 23rd, 1883—viz., Miss M. Selby, Miss J. King, Miss K. Forrest, Miss M. Thomas, Miss A. Crisp, Miss A. Yardley, Miss A. K. Holland, Mrs. Janet King, and Miss Hornor.

THE LANCET.

LONDON: SATURDAY, AUGUST 18, 1883.

IF the profession and those who are concerned in the education and welfare of the profession are disappointed in regard of their hope of effectual legislation this year, it will not be the fault of the Government. Every care has been taken to ascertain the views of different parties in the profession. But the broad issues to be decided have been steadily kept in view, and a hearty faithfulness to them has been shown. It is very easy to say that August is hot, and members of Parliament are tired, but it will be a good day for Parliament when it realises its responsibilities for dealing effectively with questions which affect so vitally the public welfare as the Medical Bill does. It is not what is called a "burning" political question, but, as affecting the self-respect of the profession, and the respect of the public for it, it is one of the most useful measures which Parliament could be called on to consider; and, as based on a Report of a Royal Commission of the highest authority, which disparages existing and antiquated arrangements, it calls for attention this session. There is not a medical student nor a medical teacher who is not disturbed in his work by expectations of change in the licensing authority; and no corporation or university which has any respect for itself can wish for a continuance of the existing state of things, or can make out a parliamentary case for refusing to give clearer guarantees of equal and efficient work. Any successful opposition to the Bill now, while it would entail discredit on the body and the persons responsible for it, would not long avert legislation, which is inevitable until certain indispensable reforms are procured.

What are these indispensable reforms? They are, first, the creation of a licensing authority in each division of the kingdom, which, in virtue of its constitution and sanction, shall be above suspicion, and shall give a title to practise in all branches of the profession, and in England, Scotland, and Ireland. The creation of a new licensing authority is not entirely acceptable to the old ones; but was it ever known that old bodies cheerfully accepted a change which recognised their defects and faults? The change should nevertheless be made, and made with chief reference to what is best and fairest for the profession at large, or rather for the public. It will never do to create a new licensing authority which confers no effective title, and leaves the student helplessly in the hands of the old licensing authorities for such a title. This will be to create a title-mongering business, than which nothing could be more disastrous.

The second indispensable reform is the reconstitution of the Medical Council, in which the individual representation of universities and corporations shall cease, and the direct representation of the profession shall be granted. Since our own Bill was drafted twelve years ago, we have not ceased to maintain that the individual representation of all bodies was an evil which has led to the prolongation and dilution of the Council's work, and very largely to the disrespect which it has excited in the minds of the profession. The introduction to the Council of a few members of the profession representing practitioners, and not medical bodies, is now universally recognised to be an indispensable point in any Medical Bill. We have always so regarded it, as not only likely to increase the mutual sympathy and respect of the profession and the Council, but likely distinctly to advance the solution of some problems in the practical education of students for the work of general and responsible practice.

It is much to be desired, too, that in the recasting of the penal clauses every endeavour should be made to preserve and increase the sanctity of medical titles and qualifications, and more and more austerely to punish those who by any device deceive the public in medical matters. We are not sanguine enough to believe that any law will abolish quackery, or the tendency in human nature to resort in hopeless circumstances to those who ignorantly pretend to work cures beyond the powers of regular medicine. Such pretenders are the mere foil which sets off to greater ultimate advantage the conscientious and the informed practitioner; but, as far as legislation can, it ought to protect the poor and the ignorant from the fraud and deception of false practitioners and of those who abet them.

There is one feature of the Government Bill which is full of interest, and promises new life for the profession—namely, the creation of medical boards in each division of the kingdom. Only one thing is wanting as the Bill stands—namely, the introduction into these boards of the direct representatives of the profession. In these boards the real work of medical education will be arranged, and the means for testing it will be devised. There is reason to believe that the Government will not refuse to entertain some proposal for admitting direct representatives.

Finally, we venture to hope confidently that the Government will revert to its own original proposals for giving the Medical Council power to judge, not only of the conditions for granting a licence to practise, but of the conditions for granting Higher Titles, and, when these are not satisfactory to the Council, the power to refuse registration. This power was given in Clause 27 of the Bill as it originally stood. If this clause is not replaced, there will be a temptation to the highest bodies to compete in giving specious and deceptive titles, which disastrous competition there would be no authority to condemn or check. The replacement of Clause 27 will double the value of the measure, for which the profession cannot be too grateful to the Government.

IF anything were wanted to quicken in medical men their intense desire to perfect their knowledge of Disease and its Remedies, it might be found in the fact that so much is being done in the press and in the daily newspapers to enlighten the public on this subject. Medical men have not only to discuss questions of disease and its treatment with each other, but with intelligent laymen who avail themselves of all means of gaining information on the fundamental principles of medicine. It is quite true that for years to come the intelligent layman will not be able to make much of this study, and will be apt to arrive at conclusions not at first sight very complimentary to his intelligence. We are all humbled now and again to hear how this noble

lord and that man of literature have adopted a belief in homœopathy or in a quack medicine, as the result of the attention which they have been able to give to medical subjects. But a little reflection on the complicated nature of medical problems and on the limitations of the best medical faculty will suffice to make practitioners very indulgent to those who reach crude or absurd conclusions.

In the current number of the *Quarterly Review* and the *British Quarterly Review*, respectively, there are two articles which are in point. The article in the *Quarterly* is "On the Progress of Medicine." It will well repay perusal, from the sense of strict scientific justice and precision which the writer shows, and from his abstention from strong and extreme propositions. The article in the *British Quarterly* is entitled "The Relation of Drugs to Medicine," and is signed "BAPTIST CROFTS, B.A." Mr. CROFTS' paper is also well worth reading. His main contention is that, both in medical practice and in popular habit, there is a marked tendency to abate the use of drugs; that, in fact, we are drifting, not slowly, to a system of drugless therapeutics, or to a time when therapeutics will be superseded by a perfect hygiene—when there will be nothing "to hurt nor to destroy." Mr. CROFTS finds the chief explanation of this great change in the fact that medicine, in its studies and its objects, is becoming growingly more scientific, and especially more biological; that, indeed, medicine in its true sense has only lately come into existence, and is the child of biology. The writers of both the articles we have referred to see in disease only an awkward form of health, and in pathological processes only a modification or disturbance of physiological ones, with a marked tendency to right themselves and to revert to healthy conditions. There is nothing, as Mr. CROFTS says, in this view really new. It was shared by HIPPOCRATES and by SYDENHAM, and has always been most strongly held by sound medical minds. But it has grown stronger and stronger of late, and, according to Mr. CROFTS, threatens the very use of drugs as factors in the removal of disease. Mr. CROFTS himself admits that at present we are quite unable to dispense with the use of drugs. "It must," he says, "be at once admitted that for the immediate future certain drugs appear to be quite indispensable; that the offices they perform cannot otherwise be supplied. But," he goes on to say, "it is clear that a more scientific, because a more fundamental, principle of treatment is coming into play, in which drugs will take a very subordinate and adventitious part." Though there is considerable truth in this representation, we think the *rôle* of drugs is understated by Mr. CROFTS, and that we are not within any measurable distance of the time in which physicians will be able to dispense with them.

It may be said with safety and literal truth that drugs never played a more important part than they do now, that they never did so much good and so little harm as in the present practice of medicine. Let one month be imagined in London without chloroform, opium, atropine, quinine, iron, salicin and its compounds, carbolic acid, iodide of potassium, ammonia, without common laxatives or cod-liver oil, and suffering and death would be immensely increased. A few recent discoveries of the power of drugs over physiological and pathological processes are of the very highest scientific and practical interest: witness the influence of salicin over rheumatic pyrexia and pain, and of pilocarpine over the sweat and salivary glands. We can foresee no immediate millennium in which it would be possible to minister to disease and suffering without these helps.

We cannot close this article without directing attention to the marked contrast between Mr. CROFTS' estimate of drugs and that which constitutes the basis of the system of HAHNEMANN, who has been, with wretched taste and judgment, called by his credulous disciples the Messiah of Medicine. The huge error of HAHNEMANN was in the supposition that nature played no part in the cure of disease, and that his petty medicines worked miracles. There was a moral element of vanity in this conception, as well as a scientific error of the first magnitude, which will for ever exclude him and his followers from the respect of scientific men. To teach that all disease is to be absolutely *cured* by medicine, and will for all time be incurable in any other way, and that for the cure of each disease there was one specific drug, with disease producing qualities, is a captivating doctrine for the ignorant and the credulous, but one which can have no place in the mind of scientific men. HAHNEMANN abandoned himself to his doctrine of specifics, and ridiculed that which Mr. CROFTS and all sensible men see to be the fundamental rule in the treatment of disease—*tolle causam*. If we think that Mr. CROFTS goes too far in under-estimating drugs, his error only shows more clearly the fundamental folly of that system in which they are all in all.

A MOST important step has just been taken by the Lieutenant-Governor of Bengal in connexion with the education of females as medical practitioners in that Presidency. Last year Mr. CROFT, Director of Public Instruction in Bengal, brought under the consideration of the Principal and Council of the Medical College in Calcutta the propriety of throwing open the medical classes to female students, with a view to their qualifying themselves for the licence to practise medicine and surgery. The grounds upon which this recommendation was made were twofold: (1) Because a body of qualified practitioners would be thus formed whose services would be available in the zenanas, where male practitioners cannot under any circumstances be admitted; and (2) it would open a career of usefulness to the native ladies who are now passing the University examinations. On that occasion, the Council, by a majority of four to one, passed resolutions unfavourable to the admission of ladies to the medical classes, and recommended the establishment of a separate college, if female medical education were deemed necessary. At the same time, they expressed an opinion that this was not requisite, but that an extension of the existing training in midwifery would be sufficient to meet the requirements of the case. Mr. CROFT had also recommended that, if his suggestion were adopted, the qualification for entrance to the College should in the case of the ladies be lowered. The Council was unanimous in its opposition to this recommendation. The question was again brought forward this year by Mr. CROFT, who forwarded to the Lieutenant-Governor the papers connected with his previous application to the Council of the College, supplemented by a letter from Dr. COATES, the Principal, reviewing the objections to the admission of ladies, and stating his opinion that there would

be no difficulty in lecturing to mixed classes, and that no injurious consequences would result from their introduction. The Lieutenant-Governor, in a memorandum dated June 29th, has gone into a consideration of the whole question, and being of opinion that there is "an overwhelming weight of argument" in favour of the admission of females to medical education, has overruled the decision of the Council of the College. He has at the same time negatived Mr. CROFT'S proposal to lower the educational standard of admission in favour of females, observing that "he knows of no profession in which a preliminary education, training the faculties of observation and thought, is more needed than in the profession of medicine. He therefore thinks that it would be conferring a fatal gift on the cause of female medical education to expose it to the risk of practical failure by withdrawing the necessity for that solid foundation of general knowledge on which the superstructure of technical information can alone be safely built." He also throws upon Dr. COATES, as Principal of the College, the duty of making all the necessary arrangements as regards separate seats, screens, and waiting-rooms which may be necessary for the efficient and satisfactory working of the new system. The official documents, including Dr. COATES'S letter, on which the Lieutenant-Governor formed his opinion, have not been published in the paper which has reached us, but even without these we have come to the conclusion that he has exercised a sound judgment in the decision which he has given. The condition of the native ladies when labouring under disease is most deplorable. Deprived, by the rules or prejudices of caste, of the services of medical men, they are left entirely in the hands of women wholly ignorant of the nature or treatment of disease, without any possible means of rescue from the consequences. Whatever may be thought as to the training of female doctors in our own country, there can be but one opinion, we think, as to its advisability, we may rather say the imperative necessity, for it under the conditions which regulate native female society in India. If judiciously carried out it cannot fail greatly to diminish unnecessary suffering and to save life. It will require sound judgment to be exercised, especially in the early stages, to prevent strong prejudices arising, which might counteract the anticipated benefits, but we have little doubt that every care will be taken on this head. We look forward with confidence to the gradual development of a system which will be productive of much substantial good in a direction which has hitherto been found to be impracticable.

THE mechanical theory of uterine pathology, although the subject of very divergent opinions among gynæcologists, has nevertheless met with a very large measure of acceptance at the hands of the profession. Whatever may be the reason for this—whether it be the generally acknowledged and indisputable fact that dysmenorrhœa and flexions are frequently met with together, or whether it be, as is maintained by its advocates, that a causal relation exists between the flexion and the suffering, or the charming simplicity of the theory itself,—true it is that the evidence upon which the theory is based has been obtained from observations made in women suffering from uterine troubles, and from such only. It is therefore of a very one-sided character, and far from conclusive. During the last two years the theory has been the subject of a very critical examination; the evidence in its favour has been carefully sifted, while new inquiries based on scientific principles have been carried out, which throw a new light on so-called displacements, and which are calculated to settle finally the much-discussed question—the part played by flexions in the pathology of the uterus. These inquiries have been made to determine the position of the uterus (1) in women generally who sought advice for other than uterine troubles, (2) in those who did *not*, and (3) in those who *did*, suffer from dysmenorrhœa.

These researches have been conducted by HERMAN in London and by VEDELER in Christiania. We have on previous occasions directed attention to some of the results obtained by these observers. Additional observations by VEDELER are published in the last number of the *Archiv für Gynecologie*. HERMAN examined 111 unmarried nulliparous women, who sought advice not for uterine troubles but for local contagious disease. In these he found the uterus anteflexed in 67, or 60·3 per cent.; straight in 43, or 39 per cent.; and retroflexed in 1. VEDELER examined 749 nulliparous women, and found the uterus anteflexed in 66 per cent., straight in 31 per cent., and retroflexed in 3 per cent. In virgins he found anteflexion present in 71 per cent. In these calculations cases of uterine disease were not excluded, so that the great frequency of flexions of the uterus shown may be due to that circumstance. To obviate this source of error VEDELER examined 414 virgins and 506 nulliparous women in whom the uterus was healthy. In the former he found the organ in a state of anteflexion in 296, or 71 per cent.; straight in 105, or 26 per cent.; and retroflexed in 13, or 3 per cent. In the nulliparæ he found the uterus anteflexed in 361, or 71 per cent.; straight in 128, or 25 per cent.; and retroflexed in 17, or 3 per cent. So that, according to these observers, the prevailing position of the uterus is one of anteflexion, and this prevalence extends to nearly three-fourths of all nulliparous women.

The second part of the inquiry had for its object the determination of the position of the uterus, not in women generally, but in women who suffered *no pain during menstruation*. HERMAN examined 42 nulliparous women who came under this division. In these, the uterus was anteflexed in 26, or 62 per cent.; straight in 16, or 38 per cent. VEDELER examined 59 virgins and 101 nulliparous women who suffered no menstrual pain, and found the uterus anteflexed in 68 per cent., straight in 30 per cent., and retroflexed in 3 per cent.

The third object of the inquiry was to determine the frequency of so-called displacements in the subjects of dysmenorrhœa. Under this head, HERMAN gives the number of those who suffered slightly, as well as of those who suffered severely; while VEDELER gives the latter only. In 35 women who suffered slight pain during the period, HERMAN found the uterus straight in 15, or 43 per cent., and anteflexed in 20, or 57 per cent.; in 35 who suffered severely he found the uterus straight in 12, or 34 per cent., and anteflexed in 23, or 66 per cent. VEDELER examined 82 virgins and nulliparous women who suffered from severe dysmenorrhœa, and found anteflexion present in 71 per cent. retroflexion in 4 per cent., and the uterus straight in 24 per cent.

It will be noticed that there is a remarkable similarity in the results obtained by the two observers, who apparently carried on their researches quite independently of each other, and probably about the same time. HERMAN finds throughout a larger proportion of straight and a smaller proportion of anteflexed uteri than VEDELER; but the difference is not great. They are agreed as to the enormous prevalence of anteflexion of the uterus in the three classes of patients examined.

These figures show, further, that anteflexion of the uterus is met with in about the same proportion in nulliparous women, from whatever class they are taken—whether from the ordinary run of women who seek advice for ailments other than uterine, or from those who suffer from dysmenorrhœa, or from those who menstruate without pain. In the three classes the proportions of straight and of bent uteri are almost precisely the same. According to VEDELER'S statistics, the same is true of retroflexion as of anteflexion, except that the former is much rarer than the latter in nulliparæ; but the presence or absence of dysmenorrhœa seems to have no effect whatever on the percentage of retroflexion, any more than it has on the percentage of anteflexion.

In addition to the preceding facts HERMAN found that of 57 women in whom the uterus was slightly or not at all flexed, 40, or 70 per cent., menstruated without pain, and 17, or 29 per cent., with severe pain; of 53 women with pronounced anteflexion, 37, or 69 per cent., had no menstrual pain, while 13, or 30 per cent., had severe pain. He found, moreover, that of 23 cases of acute anteflexion, 16, or 69·5 per cent., suffered no menstrual pain, while 7, or 30·4 per cent. only, had severe pain. In 87 others with slight anteflexion there was little or no menstrual pain in 61, or 70 per cent., and there was severe pain in 26, or 29·8 per cent. These figures show that the same proportion of women suffer from dysmenorrhœa, be the uterus straight, slightly flexed, or acutely flexed. It appears, then, that from whatever point these observations are examined, they lead to the same result—a result which entirely removes the ground from under the feet of the advocates of the mechanical theory of uterine pathology. These facts have been sought for, not in states of disease simply, but also in states of health, and unless the accuracy of the observations can be impugned and the error pointed out, the pathology based upon the mechanical theory must be discarded and replaced by another more consonant with the anatomy and physiology of the organs concerned.

THE *Spectator* demurs to our doctrine that brain-work creates a demand for more and better food than ordinary muscular activity requires. "When THE LANCET insists on the necessity for a higher and better kind of food for brain-work than is needful for physical labour, it must mean a better food for persons liable to that extreme tension of the brain which really puts the mental powers on their mettle, and demands continuous and close attention of an anxious kind." No, that is not our meaning. We mean what we say: namely, that brain-work—which, by the way, is as much "physical" as any other description of work can be—is the function of a part of the organism which is specially eclectic in its relations to food. Brain and nerve tissue are of comparatively high organisation, and the part they play in the economy of the organism is one of primary activity. They constitute the centres of its energy. They generate its force. They do not live simply for themselves, but for the whole body, and they require—to speak popularly—a specially nutritious form of food rich in nitrogen. In the article to which the *Spectator* takes exception, we were discussing particularly the case and condition of children, in which connexion it was necessary to recognise an important fact which our contemporary seems to have overlooked—namely, that the brain is not only active but growing or *developing*. There is, in fact, as it were, a double claim upon the supplies: one to replace the daily use by exercise, the other to meet the demand of growth. We do not hypothecate any special "tension" as the cause of the need for higher and better food for brain-work. We say that an organism which is doing brain-work as well as muscular work requires higher and better food than an organism in which the brain is comparatively idle and only the lower centres and the muscles do much work. Undoubtedly the effect of brain-work is to strengthen the brain and to render it less likely to become abnormal in its structure or disorderly in its activity than if it were idle. Such exercise as the brain receives in education properly so-called—that is, development of the faculties—stimulates nutrition, and in so doing increases the need for food. Excessive activity with anxiety, such as the *Spectator* contemplates, is not good at all, and ought to have no place in the educational process. Worry is fatal to good work, and to worry the growing brain of a child with work is to maim and cripple its organisation, doing irreparable, because structural, mischief, the effects of which must be life-long. "Tension" in work is not a proof of strength, but of weakness. A well-developed and healthy-grown brain works without tension of any kind. The knit brow, straining eyes, and fixed attention of the scholar are not tokens of power, but of effort. The true athlete does not strain and pant when he puts forth his strength. The intellectual man with a strong mind does his brain-work easily. Tension is friction, and the moment the toil of a *growing* brain becomes laborious it should cease. We are, unfortunately, so accustomed to see brain-work done with effort that we have come to associate effort with work, and to regard "tension" as something tolerable, if not natural. As a matter of fact, no man should ever knit his brow as he thinks, or in any way evince effort as he works. The best brain-work is done easily, with a calm spirit, an equable temper, and in jaunty mood. All else is the toil of a weak or ill-developed brain straining to accomplish a task which is relatively too great for it.

AN inquest was held on the 6th inst. by Dr. Diplock at Normansfield, Hampton Wick, on the body of Everleigh Langdon Down, son of Dr. Langdon-Down, who died on the 4th inst. from injuries received to the thigh from a chisel whilst in the carpenter's shop connected with Dr. Langdon-Down's Training Institute for Imbeciles at Normansfield. Medical evidence concerning the nature of the injury was taken, and, the testimony of those present in the workshop at the time the injury was received pointing to accidental death, the jury returned a verdict to that effect. Dr. Langdon-Down will have the sympathy of his professional brethren in his painful bereavement.

Annotations.

"Ne quid nimis."

SIR ROBERT RAWLINSON, C.B.

THE announcement that Her Majesty is about to confer the honour of knighthood upon Mr. Robert Rawlinson, C.B., will be received with pleasure far beyond the ranks of the public service, and of the profession with which Mr. Rawlinson is more especially identified. Mr. Rawlinson is essentially a self-made man. He first rose to a position of merit in the engineering profession by reason of real ability and untiring perseverance. The Government recognising his talents appointed him to be an engineering inspector under the Public Health Act, 1848, and all who have studied the reports presented to the General Board of Health will not have failed to observe that those which were drawn up for that Board by him stand out prominently as embodying principles which have since that date largely influenced the progressive sanitary improvements which have been made in this country. In 1855 Mr. Rawlinson went out to the Crimea as engineering member of the sanitary commission, which had the arduous task of taking measures for staying the disastrous mortality then prevailing among our troops, and it is well known that amid many difficulties and much opposition, the remedial measures which he advocated were carried out under his own supervision. Then followed the execution of public works in Lancashire during the cotton famine in 1863, repeated service on important royal commissions involving questions of public health, investigation into the sanitary circumstances of some of our royal and public buildings, and a long period of public service both in the Local Government Act Office and at the Local Government Board, where Mr. Rawlinson still holds the post of chief engineering inspector. Indeed the history of sanitary progress in this country during the last thirty years and more is intimately associated with Mr. Rawlinson's name, and the medical profession which has never failed to recognise his distinguished services in the prosecution of work so closely allied to that in which it is itself engaged, will unanimously join in congratulating him on the additional and well merited distinction which is about to be bestowed upon him.

THE WEATHER AND THE PUBLIC HEALTH.

THE mean temperature at the Royal Observatory was, with one exception, below the average on each of the thirty-two days ending on Saturday, the 11th inst., the mean deficiency exceeding 4° Fahr.; and rain was measured on seventeen of these thirty-two days to the aggregate amount of more than two inches. The effect of this low temperature and frequent rain on the public health, judged by the mortality statistics of twenty-eight of the largest English towns, has been most beneficial. The annual death-rate in these towns, which was equal to 22·2 per 1000 in the second week of July, has since steadily declined, and fell to 18·4 in the week ending 11th inst. This decline of mortality is only in part due to the decrease of diarrhœa fatality. The deaths registered in these twenty-eight towns in the second week of August were fewer by 621 than those in the second week of July, whereas the decrease of the deaths attributed to diarrhœa did not exceed 198. High temperature is especially fatal to infants, and the deaths recorded under one year of age were 373 fewer in the second week of August than they had been in the corresponding week of July, a decline considerably greater than the decrease in the number of deaths referred to diarrhœa. It is noted in the Registrar-General's last weekly return that the death-rate in these towns was lower last week than in any previous week of this year; indeed, so low a rate has not been recorded in any week since the first week of July last year. It is almost entirely a matter of temperature whether summer is the healthiest or the unhealthiest season of the year. With low temperature, more especially if accompanied by rain, summer death-rates are almost invariably low, whereas if really hot and dry weather prevail the death-rates not unfrequently touch the highest point of the year.

THE BURNING OF DR. BOYD'S ASYLUM.

WE cannot trust ourselves to do more than express the deep pain and regret with which we, in common with the profession generally, and the specialty of mental medicine in particular, mourn the sad calamity by which Dr. Boyd has met his death, and his son and several of the inmates of his ill-fated establishment have been sacrificed. Dr. Boyd and his son, Mr. W. B. Boyd, died nobly striving to save the lives of others. This is some poor consolation, but the loss of so able and respected a physician as the late Dr. Boyd, under circumstances so painful as those with which the newspapers will have made the profession acquainted, cannot but leave a wound which it is hard to heal. Hereafter we may have something to say on the subject of the great need which, undoubtedly, exists for better provision against the hideous calamity of fire occurring in asylums for the insane. The conditions affecting these institutions are peculiar. They are generally in remote districts, and their inmates are not only incapable of helping themselves in an emergency, but very apt to oppose means for their rescue. It is known to those who are familiar with the delusions of the insane, that many of them cherish such perpetual forebodings of eternal punishment that when a fire occurs they fancy the end of the world has come, and that those who seek to rescue them are fiends intent on leading them to greater torments. This hideous delusion makes it tenfold more difficult to help the inmates of an asylum to escape than to render like aid to sane persons similarly situated. And yet there are scarcely any provisions for the rapid extinguishing of fires at asylums for the insane, or for the escape of the unfortunate victims of such a dire misfortune. The matter is not one upon which the Commissioners in Lunacy, in their wisdom, appear to think it worth while to bestow more than a very perfunctory attention.

HARBOURS OF REFUGE.

THE periodic loss of life which now and again appals us, as occurring along the east coast, has forced the attention of the Government, and at present inquiries are being made by a commission as to the most fitting sites for harbours of refuge along these dangerous shores. There is, perhaps, no public expenditure which would be more willingly borne by the taxpayers than such as would render life at sea less hazardous, and we trust ere long that preliminary investigation and disputes as to rival claims will give way before active provision against the losses we have so often had to deplore. But the construction of substantial enclosures is a work of years as well as of vast expense, and such natural harbours as are proposed can only be provided at wide intervals. For these reasons it seems clear that any scheme giving reasonable hope of even partial success, of slight cost, and easily adaptable to many localities, should receive a favourable hearing from the Board of Trade and the shipping community. During the past year or two a good deal has been heard about the invention by Mr. Shields of means for "throwing oil on the troubled waters." That gentleman has, at great cost of time and money, lost no opportunity of exposing his method to the most severe tests, and recently the inspector for the Board of Trade has reported in its favour. Captain Pryer says: "I believe it is no longer an idea, but a reality, and that by scientific

application great and beneficial results will be obtained." This being so, there seems no reason why this simple and inexpensive method should not be experimentally put in practice at several of the more dangerous entrances to our harbours before winter sets in; and it appears Mr. Shields has suggested a scheme for the protection of the South Bay at Peterhead, which could be carried out at a cost of £350 or £400 for the apparatus. If a few hundred gallons of oil are enough to render this considerable sheet of water as smooth and safe as a mill-pond, there is urgent need that means should be found for providing such not only at Peterhead, but at numerous points around our coasts. We cannot suppose the Board of Trade neglectful of such a grave matter as this, but the deadening influence of red-tapeism is proverbial, and judicious pressure might with advantage be applied. It would be a serious infliction upon our system of public business were the colonies or foreign countries the first to show themselves appreciative of this promising means of life-saving. There is some prospect of this.

FORCIBLE DIGITAL DILATATION OF THE PYLORUS.

PROF. PIETRO LORETA has published as a monograph the memoir which he read before the Academy of Sciences of Bologna on the 11th of February last, on Forcible Digital Dilatation of the Pylorus ("Intorno alla Divulsione Digitale del Piloro"). To summarise the facts. Nicola C——, aged forty-seven, had suffered for the greater part of twenty years from imperfect digestion, distension of the stomach, sense of weight, and occasional vomiting. In 1878 he was admitted into the Bologna Medical Clinique, and treated for ulcer of the stomach. Relief ensued, but only for a short time. Eructation, a burning feeling in the throat, vomiting of undigested food, sometimes mixed with blood, increasing emaciation, and pallor of the skin and mucous membranes were noted. The man subsisted on a little milk. The distended stomach gave a clear note on percussion from the fifth rib to the umbilicus. Microscopic examination of the fluid drawn by pump from the stomach yielded no evidence of organic lesion. On palpating the emptied stomach, a tumour could be felt in the pyloric region, with smooth and elastic surface, but not very well defined limits. As the patient was steadily sinking, Professor Loreta, on Sept. 14th, 1882, operated, in the presence of numerous colleagues; Dr. Alfonso Poggi administered chloroform. The stomach was washed out with an alkaline solution. The incision into the abdominal wall was commenced a little to the right of the linea alba, and extended outwards and downwards for six inches; the lower angle was an inch and a quarter from the ninth right costal cartilage. In the incision were included the oblique and transverse muscles, and also a part of the rectus. On reaching the peritoneum, the Professor stopped to tie some arteries and to wait the complete arrest of bleeding from the edges of the wound. The peritoneum was then opened. The omentum was extensively adherent by old inflammatory exudations. These were separated very slowly and carefully from the abdominal wall and from the surface of the stomach. This viscus was then drawn out through the wound, and the operator felt the pylorus much enlarged and of fibrous hardness. In the space between the two curves of the stomach, and at a distance of an inch and a quarter from the pylorus, an opening was made into the viscus with a stout pair of scissors through a transverse fold previously raised. The opening into the stomach was extended two inches and a half, and T-shaped forceps were used to arrest bleeding from the edges. The right index-finger was then passed into the stomach towards the pylorus, which was completely closed. The finger failed to pass into the duodenum, in spite of considerable pressure and combined lateral and rotatory movements. The left index-finger was then introduced into the stomach and used to fix the pylorus, while strong and renewed pressure was exerted to push the first phalanx of the right index into the narrow and contracted pylorus, which was then drawn forwards to the external wound. Along the right index-finger the left one was also introduced into the pylorus, but these attempts failed to pull one finger from the other in spite of much force, sustained as long as possible ("moltissima forza, nel sostenerla quanto piu a lungo potessi"). After resting, the operator resumed his efforts and dilated the pylorus, though he only succeeded in doing so very slowly, and by employing very great force. The dilatation was continued to about three inches (eight centimetres). The stomach wound was then sutured with carbolised silk, the viscus replaced in the abdominal cavity, and the external wound closed with seven silver sutures. The patient was returned to bed thirty-three minutes after the commencement of the operation. On regaining consciousness the patient complained only of thirst and of a slight burning sensation at the wound. Small pieces of ice were given from time to time. In the afternoon the patient complained of weakness and hunger, and relished the yelk of an egg beaten up with Marsala wine, given in teaspoonfuls every half hour. The temperature throughout the day was 98°, pulse 72, respiration 26. The same kind of diet was continued. The third day after the operation the bowels acted after an enema, the fourth day some broth and light paste were allowed, the fifth day some chicken, the sixth day bread was added to the diet. On that day the bowels acted spontaneously. The wound was first dressed on the eighth day, and five sutures removed. The incision had healed by the first intention. The two remaining sutures were removed on the eleventh day. The thirteenth day after the operation the patient's diet consisted of coffee and milk, bread, roast chicken, roast beef, eggs, and wine. He was out of bed for two hours and a half on the sixteenth day, and rapidly gained flesh and strength. Two days before the operation the man weighed 122 lb., and gained about 33 lb. in six weeks. He continued to enjoy perfect health when presented to the Bolognese Academy after the lapse of five months. Professor Loreta subsequently performed a similar operation in another case, and with equally good result, but in this instance he experienced much less difficulty in dilating the pylorus.

EPILEPTICS IN WORKHOUSE WARDS.

MR. ELLIS, of the Kensington Board of Guardians, objects to the presence of epileptic children in the "insane wards" of workhouses. We entirely sympathise with his view of the question of expediency; but it is necessary to be reasonable as well as wise. Where are these poor children to be placed? They must not, for obvious reasons, be allowed to remain in the schools. It would be cruel to isolate them entirely, and thus make their little lives utterly forlorn. They cannot be placed in the infirmary without exposing them to influences which are not conducive to health, whereas with the insane—such insane as are kept in workhouses—they enjoy immunity from annoyance; they are kept under observation, and, as a rule, they are kindly treated. We know no more melancholy spectacle than that of a ward wholly set apart for epileptics. It is a very hotbed of nervous disease. The guardians of Kensington would appear to be in great difficulty as to the use of their so-called "insane ward." We would suggest that they should use it for imbeciles, the only proper inmates of such an apartment. Instead of sending all the old folk to lunatic asylums, crowding these institutions and necessitating a ceaseless extension of asylum accommodation, let workhouse wards be reserved for their legitimate use—the allowance of four shillings a week notwithstanding. As to the remark of Mr. Webb about the use of the ward by persons

sent there under a magistrate's order, we can only say that such persons have no right or place there. The "insane wards" of a workhouse are not legally or advisedly places of "remand" for persons charged with being insane. Such persons ought to be sent to a special institution, where they would be under medical observation, to ensure prompt treatment for the really unsound of mind, and to prevent the great mistake of sending weakly, worried, or distressed because dissipated, persons to lunatic asylums when they are not insane.

HONOURS TO MEDICAL MEN.

THERE is a widespread feeling in Scotland that our friends across the Channel have in raising so prominently the question of the distribution of State honours in the profession somewhat departed from their customary dignity. This is said even while recognising the merits of their case. In Scotland there was a distinct disposition to maintain silence till Mr. Gladstone's answer on Tuesday week in the House of Commons; but it is now felt that, however close may be the unity of the profession in the three countries, satisfaction throughout the ranks cannot be maintained by showering all the honours on London practitioners. There are leaders in the profession resident in Scotland and Ireland who might with fitness be consulted if Mr. Gladstone wishes the true feeling of medical men generally to be elicited, and had this been done in the present instance much irritation would have been avoided. There is no one in London more popular with his fellow countrymen than Sir Andrew Clark; they have rejoiced at the eminent position he has attained, and would gladly congratulate not only Sir Andrew, but the distinguished surgeons who have of late received the same evidences of Royal favour; yet they feel that the claims of Scotland need not have been entirely overlooked. We have now neither baronet nor knight north of the Border, notwithstanding the world-wide fame, yearly increasing, of our teaching universities and the recognised eminence of more than one of our teachers and consultants; but even among those who command universal respect all Scotland would probably join in pointing to a distinguished Glasgow physician as one certain to maintain the dignity of any honour within the reach of the medical profession. Already honoured with the confidence of Her Majesty, and of the entire profession in Scotland, it wants but the public seal of Royal approval to indicate clearly the leader in medicine in the North. We are well aware of the Queen's attachment to Scotland; it is to her advisers we must look for justice in a matter which should scarcely have required public discussion.

THE MEDICAL OFFICER OF HEALTH FOR SHEFFIELD.

THE Sheffield Corporation are divided amongst themselves as to whether they should appoint an officer of health who shall have sufficient independence and time properly to perform the duties of his office, or whether, under the plea of managing their own affairs as they choose and without any central interference, they should continue a system which has been tried and has failed. Some years ago they had a medical officer of health who devoted his whole time to his duties; but they got rid of him and appointed Dr. Hime to the post at a salary which necessitated his continuance in private practice, and judging from the remarks made in a recent discussion, it seems evident that this course found favour with at least some members of the Council, because they hoped to keep their officer in a really dependent position. All who have followed Dr. Hime's career know that he has all along refused to sacrifice the independence which was necessary to a proper performance of his duties, and this in the face of many difficulties, and notwithstanding the suppression of some of his reports. He has, however, now resigned, and the question has arisen whether this important borough, so much standing in need of untiring and continuous medical supervision, should have an adequately paid and independent officer, or whether the new medical officer of health should be again placed in such a position as will leave to certain members of the Corporation the right to control as they choose. After much discussion, it was decided that an officer should be appointed at £600 a year, and that the Local Government Board should be requested to pay one-half of the salary; but by a snatch vote, and acting under the guidance of one member who, according to one of his own colleagues, clamoured for liberty and freedom from control, in order that he might be "at liberty to kick his own nigger," the amount was subsequently reduced to £500 a year, the whole to be paid by the Corporation themselves. We trust that at a later stage the original intention of granting £600 a year will be carried out, for the sum is the smallest that should be entertained in the case of such a district as Sheffield, and it might have the additional effect of inducing Dr. Hime once more to become a candidate for the post. The difficulties which have arisen during his tenure of office have been, in the main, due to the fact that he was never placed by the Corporation in the position which both the nature of his office and his abilities as a sanitarian demanded; whereas he has, notwithstanding these drawbacks, carried out investigations and performed services which merit recognition at the hands of the local authority.

MEDICATED GELATINE IN SKIN DISEASES.

PROF. PICK of Prague has recently advocated a new method of applying remedies to diseased skin. He melts in a water-bath some pure white gelatine in twice its weight of distilled water, and whilst keeping up an incessant agitation adds the quantity of medicinal substance—e.g., chrysarobin, iodoform, salicylic or phenic, and pyrogallic acids, and then allows the mass to cool. For use a portion of this mass is melted in a little receptacle placed in boiling water, and is then applied to the diseased skin by a camel-hair brush. It presently sets and compresses the skin; but unless smeared over with a little glycerine, in the proper use of which some little experience is needed, the gelatine is apt to crack and fall off. In this way Pick has obtained good results in psoriasis by the application of a gelatine containing 10–20 per cent. of pyrogallic acid, or 10 per cent. of chrysarobin, after a thorough washing of the parts with potash soap in a warm bath. In severe cases he renews the applications every two days. He has also successfully employed gelatine medicated with 5 to 10 per cent. of salicylic acid in the squamous stage of chronic eczema, and some erythematous conditions, and in pruritus. The gelatine is easily removable by washing.

A CHEMIST ACTING AS A MEDICAL PRACTITIONER.

IT is satisfactory to see a chemist who places himself in a thoroughly false position brought to his senses by law. We publish in another column the report of an action by the Medical Defence Association, acting under the advice of Mr. Pridham and in the name of the Apothecaries' Society, against Mr. Charles Pearson, a chemist, of 104, Stamford-street. Mr. Pearson, it was proved, acted thoroughly and unblushingly as a medical practitioner, went his rounds, paid his visits, and assumed all the forms of regular medical practice. The object of the action was to show that this was a breach of the Apothecaries' Act—in other words, that he was exceeding all the legitimate bounds of a chemist's work and doing the work of a medical practitioner. The judge had no difficulty in the case, and fined the defendant £20 and

costs. The defendant made worse of his case by trying to justify his conduct on the ground of being a "perpetual student" at Westminster. As such he should have known well the line that divides a chemist's work from that of a medical man. But a still more serious aspect of this case remains to be noticed. Mr. Pearson was not only a chemist but a registrar of births and deaths. Here was a chemist acting as a medical man, and having the power of registering deaths. A more unsatisfactory appointment could not be imagined. Mr. Pearson does not appear to have assumed any false title, so that his conviction has been gained under the Apothecaries' Act, and not under the law prohibiting false titles. For such glaring cases it is clearly desirable to have a provision in the new Bill—cases in which, without the actual use of titles, all the arts are practised by which an unqualified person can deceive and mislead the public.

A MISTAKEN DIAGNOSIS.

A FEW months ago in a northern university town a medical man of some professional standing read a paper before a local society on what he described as a case of poisoning by salicylate of soda. The patient, a young man, aged twenty-nine, had for some days been suffering from pains in his joints, which he thought were rheumatic. One morning on trying to get up, he complained of a pain in his side, and was compelled to return to bed. His wife sent to a neighbouring druggist for half a dozen fifteen-grain salicylate of soda powders, which she had been told were good for rheumatism. The patient was given one of these powders, and in an hour and a half fell asleep. After sleeping for two hours he was roused up and had some dinner, but feeling very drowsy went back to bed and was soon asleep again. His wife tried to waken him three hours later, but failed to do so, and sent for a doctor, who came in about an hour, and found him comatose with stertorous breathing. The pupils were contracted and not sensitive to light, the face, neck, and ears were covered with perspiration, and the extremities cold and clammy. The treatment was very simple, consisting of mustard to the back of the neck, heat to the trunk and legs, and ice to the head. The patient was seen again three hours later, when the pulse was noted to be 100. At one o'clock the next morning the pulse was 130, and the breathing laboured. Death occurred that afternoon at half-past two, sixteen hours and a half after the powder had been taken. A post-mortem examination was made, but seems to have thrown very little light on the subject. The five remaining powders were examined, and, as they gave a violet colour with a solution of perchloride of iron, were declared "to consist wholly of salicylate of soda." It was stated, however, that salicylate of soda could not be detected in the viscera or in the blood, and the urine was not tested. In the discussion which followed the reading of the paper, doubts seem to have been expressed by several gentlemen present, one member suggesting that it was acute congestion of the lungs, whilst several thought that it was not a case of poisoning at all. The President, with a foresight which does him credit, gave it as his opinion that the powders consisted of morphia, with a small quantity of salicylate of soda as an impurity. The matter would probably have remained for ever in doubt had not the widow brought an action against the druggist for £750 damages as compensation for the loss of her husband. The court ordered one of the powders to be sent to Dr. Stevenson Macadam of Edinburgh, for analysis. From his report, just received, we learn that it contained 49·6 per cent. of morphia, equal to 52·63 per cent. of muriate of morphia! This, then, effectually disposes of what was supposed to be a very remarkable case of poisoning by salicylate of soda. We may mention incidentally that the case was compromised for £400, the druggist having succeeded in showing that he sold the drug just as he purchased it from an eminently respectable firm of wholesale dealers. There is no reason, as far as we know, to suspect anything but carelessness as the cause of this admixture. But it was carelessness of a very coarse character. It is to be regretted that in the public interest the whole course of the drug and its supply was not traced. Next to the lesson of the necessity for a little more hesitation in diagnosis, and a little more thoroughness in investigation, is the lesson taught by this case as to the insufficiency of legal investigations of this kind in Scotland. Such facts as obtained in this case would scarcely have eluded exposure under the jury system of England led by a medical coroner.

PROFESSOR PARROT.

LAST week we chronicled the death of this eminent man. Born at Excideuil (Dordogne) in 1829, he was the son of a doctor in that district. Prof. Parrot began his medical career rather late; but owing to his intelligence and to a great facility for work he rapidly ascended the ladder of his profession. Externe in 1850, interne from 1852 to 1856, lauréat in 1856, doctor of medicine in 1857, agrégé de la Faculté in 1860, hospital physician in 1862, professor of the History of Medicine in 1876, member of the Academy in 1878, chief physician of the national hospital of the Légion d'Honneur in 1879, Professor Parrot's career was not only a well occupied but a brilliant one. His death cannot but be regarded as a loss to French and universal medicine. In thus rendering homage to the dead, we do not desire to refer so much to his sweeping assertion that rickets was invariably and absolutely a final stage of hereditary syphilis; for we are inclined to think that his more solid contributions to the pathology of children's diseases, and more especially to the knowledge implied by the expressions, "Parrot's bumps," "natiform skull," which have obtained currency, will prove the more lasting and just claims to distinction and remembrance.

HONORARY HOSPITAL SURGEONS, BOMBAY.

A QUESTION of medical ethics has lately been occupying the attention of the profession and of the municipality in Bombay. It appears that in one of the large hospitals of that town it was the custom to employ a surgeon and an assistant surgeon, taken from the Indian medical department, and to pay them for their services. In 1881 the Government, on the suggestion of the municipality, removed the assistant surgeon and appointed three young civilian medical men who offered their services gratuitously, as honorary assistant surgeons, the appointment being made for one year. We presume it was renewed last year. When lately the question of reappointment again came up Dr. Blanc, Professor of Surgery in the Grant Medical School, objected to it on the ground that two of them had opened shops and "put up boards in the streets indicating that these shops were there." This he considered as lowering the dignity of their profession, and he recommended that the system of paying the surgeons for their services should be again adopted, and that the sole ground of appointment should be professional competence. In the discussion which followed in the Town Council several of the members defended the system of keeping shops, one of them on the ground "that it was not a hundred years ago when doctors in England shaved their clients every morning!" After some not very profitable or enlightened discussion it was resolved, "that the present incumbents be reappointed for six months, and in the meantime, if it should be finally decided that the Goculdas Hospital should remain with the Municipality, the whole question of appointing honorary surgeons should be reconsidered." We entertain a strong opinion that such

appointments should be properly paid, so that the holders of them may not be compelled by the *res angusta domi* to sink into the position of dispensing druggists. But if from motives of economy the Government decline to pay them, care should be taken to fence the appointments with such conditions as will make them worthy of acceptance by men of good standing in the profession. We hold this view not only in the interests of the profession, but in those of the patients. It is surely greatly to their advantage that the surgeons of the hospitals to which they are obliged to resort should be men of high qualifications, and who from their position would be able and willing, when necessary, to make sacrifices of time and labour for their benefit. In England such appointments are an object of ambition, and it would be matter for regret if by any action either of Government, or of the Municipality of Bombay, they came to be considered there as situations which might be adequately filled by men of defective professional education and acquirements and of inferior social position.

CAPILLARY PULSE.

IN normal physiological existence the pulse waves become so toned down by the elastic property of the arterial walls that no pulse can be said to exist in the capillaries. Under certain circumstances the pulse wave is carried over to the capillary vessels and may be there demonstrated. Quincke published a paper on the subject in 1868 in the *Berliner Klin. Wochenschrift*, No. 34. According to him, the capillary pulse, characterised by alternating pallor and redness of the tissues isochronous with the systole and diastole of the heart's action, is specially perceptible in the matrices beneath the nails. The phenomenon may be seen sometimes in the healthy body, in those suffering from anæmia, and especially in individuals the subjects of aortic regurgitation. Quincke further observed the capillary pulse in the capillaries of the fundus oculi of two patients under treatment for valvular insufficiency of the aorta. Writing in *La France Médicale*, No. 15, M. Albert Ruault has again drawn attention to the phenomenon. He recommends the production of a vaso-motor disturbance by drawing the finger nail smartly across the skin of the forehead and studying any variations which may present themselves. A sensitive area, so to speak, is thus produced where the capillary pulse may be seen in those in whom it happens to exist. Ruault has observed the condition in various pathological states where the coexistence of excessive cardiac impulse and general arterial narrowing was noted.

THE TESTING OF AIR, WATER, AND EARTH FOR IMPURITIES.

IN his paper on the above subject, read at the Berlin Medical Congress, Dr. Koch remarked that at one period the three "elements" named were considered as capable of transmitting infection, without any exact theories being perfected as to their physical and chemical relations. With respect to air, he referred at some length to the process of filtration through gun cotton, and to the system of conducting (by means of an exhausting apparatus and supplementary appliances) a certain quantity of air to a plate of glass which was afterwards subjected to microscopic examination. Another form of test was that of bringing a current of air through so-called "nourishing fluids" in which the spores were developed. The subject of the various forms of "nourishing grounds" formed an important portion of Dr. Koch's paper, and detailed reference was made by him to the method adopted by Hesse for defining the exact quantity of air from which the spores originated, the development of which forms an important part of Dr. Koch's experimental method. A glass tube, about 12 in. long and 2⅝ in. wide, is closed at each end with indiarubber coverings, in one of which a glass pipe is inserted, while in the middle of the other is an opening about three-eighths of an inch in diameter. Gelatine is placed along the bottom of the tube, which is in a horizontal position. The smaller pipe is then placed in connexion with an exhausting apparatus, and a given quantity of air is forced through, the bacteria and bacteria-spores falling on the gelatine, which is described as being covered most thickly with them in the vicinity of the place where the air enters, while the opposite end of the tube is usually free from them. The quantity of air usually tested is said to be about twelve to fifteen litres. It is remarked that this process is a decided improvement upon the older method of assuming the quantity of carbonic acid in the air as being a measure of its impurity. According to the newer theory, air may be comparatively free from carbonic acid and still contain many noxious germs, while, on the other hand, air containing an excess of that acid may have but few of these germs. They are, however, found in relatively abundant quantity when there is dust in the air. The tests for water and earth are described as being carried out on the same principle, but with the necessary modifications. In the former case the gelatine is rendered fluid by heat, and the required quantity is introduced into a testing-tube of moderate size, a drop of the water to be examined being added, and the opening closed with wadding. After two or three days the bacteria can be distinguished. By this system of testing, one drop of water from the Spree has been found to contain 1000 germs, which filtration seems unable to remove. In testing earth, it can be strewed over a glass plate on which gelatine has previously been placed. The value of these processes will, it is considered, be much appreciated in testing the action and value of various dis infectants.

SIR LYON PLAYFAIR AND THE BILL.

SIR LYON PLAYFAIR is placed in a somewhat awkward position with regard to the Medical Bill by Mr. Gladstone's answer on Monday night. Considering that he represents the leading university of Scotland, and that he is one of very few members in the House who understand the questions to be settled—now so unsettled—by the Bill, his absence from the debate would be a misfortune regretted alike by his constituents, the profession, and the House. Yet he has taken his passage for New York on the 23rd inst. We must hope that either the Bill will be secured by that time or that he will be able to postpone his leaving. Happily the House is now doing more real work in a day than it did at the beginning of the session in a month, and the questions to be raised over the Medical Bill, if any, admit of little debate if they are placed clearly and forcibly before the House.

A WORD OF WARNING TO SPORTSMEN.

THE sudden death of General Gordon on the moors on the opening day of the season suggests a word of warning to sportsmen. Nothing can well be more hazardous than the violent exercise taken by men who are probably out of condition, even if in average health, on the 12th of August and the 1st of September. Without preparation of any kind, they instantly pass from a sedentary life to one involving exceptionally hard muscular activity and fatigue. A great demand is suddenly made on the power and strength of the heart, on the tonicity of the bloodvessels, and on the force of the nerve-centres. It is small wonder if this unreasonable call is occasionally unsuccessful. If the nature of the demand made were more clearly recognised, sensible men would not dare the risk of making it. Only a little patience is necessary. Creep up to the work in a leisurely way. Do very little at first; avoid

walking as much as possible; and, however sportsmanlike it may be to carry your own gun, be content to look and feel lazy for at least a week or two during which the body and its motive powers may be gradually accustomed to the new life, and revive the old habit of working with the muscular system instead of the brain. A certain measure of self-denial may be necessary; but better be cautious than cripple or kill the organism by toil without training.

THE MEDICAL ASPECTS OF THE RUSSO-TURKISH WAR OF 1877-78.

IT has been reserved for a German staff officer, Major Knorr, to delineate the features of the above campaign as regards the provision made by the Russian military officials for the care and medical treatment of the sick and wounded. In his recently published work on the subject, he attacks the narrow-minded bureaucratism of the Russian officials, and brings forward certain important facts in support of his assertions. Out of a combined force of 933,000 men, the Russian army lost 81,166 by disease, and 36,455 by wounds received in battle, &c. In the war of 1870–71 against France the German army lost by external injuries 28,628 men, while only 12,115 succumbed to various forms of disease. This result (taking into consideration the facts that the total Russian forces numbered 1,113,254 men, and that the two campaigns were of similar duration) is considered to indicate that many lives were saved during the earlier campaign which would have been lost had the medical system been as inefficient as was that of the Russian army during the war against Turkey. Apart from the mortality, the very high rate of illness is commented upon. According to the figures quoted by the *Cologne Gazette*, each soldier in the entire Russian army must, on an average, have been twice in hospital during the continuance of the war. If the benevolence of the Russian public and the action of the Red Cross Association had not assisted the medical organisation, the results would have been still more deplorable.

ACCUMULATION, NOT INCREASE, OF LUNACY IN ENGLAND ADMITTED.

THE Thirty-seventh Report of the Commissioners in Lunacy shows 76,765 as the total of lunatics, idiots, and persons of unsound mind officially known to the Commissioners on the 1st of January last. This is an increase of 1923 on the total of the preceding year; but, as the Commissioners point out, "During the last seven years the increase in the annual occurrence of fresh cases of insanity, paupers and private, as indicated by the yearly admissions of new cases (transfers being excluded) into establishments for the special care and treatment of the insane, has not been in excess of the annual increase in the general population. It would thus appear," they add, "that if we take the total population, the proportion of persons attacked with insanity is not at present on the increase, and that the addition made annually to the total number of certificated insane persons maintained under care and control is *due almost entirely to accumulation of chronic cases*." In short, the Commissioners now admit the accuracy of the contention first made in the *Nineteenth Century* and in these columns by Dr. Mortimer Granville, some years ago, when his opinion was severely criticised and our acceptance of his views challenged by statisticians, and by members of the profession and practitioners in the specialty. It is satisfactory to find the fact affirmed by official authority. Lunatics belonging to the pauper class have been gradually and with progressively increasing care gathered into the number of the insane known to the Commissioners. The inmates of asylums have meanwhile been treated with increasing tenderness, and they have gained something in the average length of their lives, so that they appear a greater number of times in the annual return than formerly, and help to augment the total of the insane population. The Commissioners in Lunacy use the very word, "accumulate," to which exception was taken in the controversy that arose a few years ago, when the doctrine that insanity was not increasing though insane persons were accumulating was denounced as false.

M. RENAN ON THE VALUE OF LIFE.

THE view of life propounded by M. Renan, in his singularly eloquent address to the pupils of the Lycée Louis le Grand, was *couleur de rose*. Perhaps it is as well that it should have been so. Assuming that the placid retrospect which the philosopher took of human experience was, from his standpoint, a real, and not what is sometimes called a "philosophic," view, the lines must have fallen to him in pleasant places, or he has succeeded in a very special degree in rising superior to the force and entanglement of circumstances. Admirable as the speech was, it would have been better if it had been somewhat more candid, and, withal, practical. It is doubtless true that the "joyous intoxication" of youthful energy has its legitimate use and purpose. By the aid of this motive power of life and enjoyment much difficult and laborious work is accomplished, and many disappointments are prevented from exerting their depressing influences. At the same time, it is necessary, and we think it would have been wise on this occasion, to recognise that the path of life does not always lie in the sunlight, and that mere bounding hilarity will not suffice to carry a man safely over all the sloughs, up all the long hills, across all the rapid and dark rivers, through all the valleys and ravines he will have to traverse. Something more than "joyous intoxication" is needful. M. Renan is happy in the enjoyment of a careless evening of life; but in the morning a man needs to be careful, though certainly not in a morbidly anxious way. Let not him who puts on his armour boast as he who puts it off. Life has, indeed, a high value, but in order to realise its worth there must needs be pain and toil.

VENTILATING SHAFTS FOR THE SEWERS OF LONDON.

ATTENTION has, at last, been called in the House of Commons to the foul gases which rise from the street gratings of London sewers. We are all very busy pointing out the faults in our neighbours' establishments, but we overlook those in our own. As a matter of fact, many of the most "respectable" localities of this great city are polluted by sewer-gas. It is discreditable that this nuisance and danger has been so long disregarded. It would be unreasonable to expect that the mere fact of calling attention to the evil should produce any immediate effect. Sooner or later, however, if only the subject be sufficiently ventilated, the sewers may be ventilated also, as they ought to be—by shafts.

BACILLI AND CHOLERA.

THERE is probably nothing which takes place in the universe which may not ultimately be resolved into two principal phases. Every process may be likened to the swing of the pendulum. In every natural action we almost certainly have to do with a to-and-fro or an up-and-down period. The rhythm may vary infinitely in respect of space and time, but the notion of a cycle probably pervades all cosmic phenomena. The force and truth of these general remarks are perhaps nowhere more patent than in the study of those natural phenomena—the changes of pathological doctrine. After the careful series of researches conducted

by such able observers as Drs. Lewis and Cunningham, we were warranted in believing that cholera was independent of the presence of any microscopically demonstrable poison. In *The Times* of Aug. 14th a paragraph announces that Dr. Kartalis, of the Greek hospital, claims to have made the important discovery of living bacilli in the blood of cholera patients, the organisms being visible under the microscope. We shall await with interest the confirmation and further particulars of this discovery, which does not necessarily imply a belief in the bacterial origin of the affection.

COLD BATHING A HINDRANCE TO CURE.

WE are open to anything that looks like truth and sense wherever it appears. The *Monthly Homœopathic Review* is not an organ from which we can be accused of often quoting, but in the number for August there is a hint which we readily take from Dr. Pröll of Nice and Gastein. It has reference to the case of a Russian child, aged seven, troubled with chronic diarrhœa, for the cure of which all treatment, homœopathic included, was unavailing. The boy looked exceedingly ill, face pale, sallow, emaciated, with dark hair and sunken eyes. The urine contained a sensible amount of albumen, and Dr. Pröll was in despair. At one of his visits he heard the child screaming, and ran to him and found him naked and being rubbed down with a sponge full of cold water. It instantly occurred to Dr. Pröll that this was keeping up the diarrhœa and the albuminuria, and he ordered its discontinuance and the use of more limited sponging with tepid water. Three days after the diarrhœa ceased After a week the albumen was reduced to half, and after a fortnight "the Bright's disease was cured." This is very bad homœopathy, but it is good practice, and we gladly record it to Dr. Pröll's credit and for the advantage of all physicians.

TRANSFUSION OF BLOOD.

THE *Presse* of Vienna lately described an operation of the above kind successfully carried out by Professor Nothnagel in conjunction with Herr Ritter von Hacker. On account of the unsatisfactory results recently obtained in several cases by using human and lamb's blood, it was resolved to try a better method, already suggested by several physiologists. This consisted of a solution of common salt of 0·6 per cent. rendered alkaline by two drops of concentrated solution of soda. The patient treated on this occasion was a young man who was in imminent danger from weakness of the heart, consequent upon loss of blood by reason of an abscess in the stomach. An incision was made in a vein in the upper part of the arm, and by means of a funnel-shaped receptacle about two pints and three-quarters of the fluid in question were introduced into the system of the patient, who is now expected to recover.

CHOLERA HOSPITALS.

THE Bill to enable sanitary authorities in Ireland to take possession of land for the erection of temporary hospitals, brought in by Colonel Nolan and others, and read the first time last week, provides that when a case of cholera has occurred within a sanitary district, the authorities of the district, having first obtained the consent of the Local Government Board, may take possession for a temporary hospital of a site within their district. No site shall be taken which is within 200 yards of a dwelling-house without the consent of the occupier of such house, and shall not contain more than two acres. The measure, which is intended to continue in force until next May, provides that any person interfering with the affairs of, or persons deputed by, the sanitary authority, when carrying out its provisions, shall be liable to six months' imprisonment.

CARBON MONOXIDE AND PREGNANCY.

A DEBATED point in animal physiology is the question whether carbon monoxide can pass from the maternal to the fœtal circulation. The influence of the subject outside the sphere of pure physiology is small but important. Accidentally or suicidally, a pregnant woman may have succumbed from the respiration of fumes from burning charcoal. Can the life of a viable fœtus be saved by the timely aid of a Cæsarean operation? From his investigations on rabbits M. Hogyes has answered this question in the affirmative, since he was unable to detect the gas in the fœtal circulation by means of the spectroscope. MM. Gréhant and Quinquaud, however, conclude (see *La France Médicale*, No. 16) that, in small quantities, carbon monoxide may pass over from the maternal to the fœtal blood.

"HOSPITALS AND NURSING SISTERHOODS."

MR. WARRINGTON HAWARD, in a letter to *The Times* on this subject, draws an important distinction between the services of educated women in hospitals and the services of "sisterhoods." If a "sisterhood" undertakes the nursing, it must needs do so as an external organisation labouring in the hospital as in a "field." The hospital is, consequently, secondary in importance to the work done in it. The only proper system is that which preserves the independence of the hospital, and makes all those who labour in it servants of the medical charity. We have repeatedly expressed this view, and we are glad to see it defended and applied by individual members of the profession.

DISEASES PREVENTION (METROPOLIS) BILL.

THE alterations which have been made in this Bill since it was passed by the House of Commons will materially affect its character. In the House of Lords, Lord Carrington has announced that it will only remain in operation for one year. Whilst it deals with infectious diseases generally, it is therefore obvious that its main object is to tide over any cholera epidemic with which this country may be visited. It is, however, to be hoped that as regards abolishing the distinction between paupers and non-paupers, and in several other respects, this temporary measure may form the basis of future permanent legislation with respect to isolation in the metropolis.

DIPHTHERIA AT CALNE.

THE outbreak of diphtheria which has prevailed at Calne has apparently been mainly brought about by defective sewer ventilation, and the progressive closing of offensive ventilating shafts has increased the evil. The subject has been discussed *ad nauseam*, but nothing really efficient has as yet been carried out to remedy defects which are the more serious because the sewers are made to receive putrid blood from certain manufactories. For the moment the diphtheria has all but ceased, and this is the time for providing a remedy to prevent its recurrence.

THE Irish Graduates' Association held their annual meeting at the college, Shaw-street, Liverpool, on Wednesday, Aug. 1st, 1883, Prof. G. F. Yeo, M.D., in the chair. Prof. W. Stokes, M.D., was elected as President for next year, when the annual meeting will be held in Belfast. A vote was unanimously passed approving the decision of the Vice-President, Dr. Banks, in refusing the offer of knighthood lately made to him. In the evening the members and their friends, including several ladies, dined at the Adelphi Hotel. After a pleasant dinner the hosts and their guests attended the reception of the Mayor at the Town Hall.

ON the 21st ult. Dr. Milligan Patchin, a young physician of unusual promise, died under peculiarly painful circumstances in New York. He was found in his room in a moribund condition, having been wounded by a pistol ball which passed through the heart and a portion of the left lung. Careful examination at the inquest showed that the discharge of the pistol must have been accidental, and the friends have thus been relieved from the distress caused by the opinion which was held at first that Dr. Patchin had committed suicide. In October the deceased was to enter upon his duties as interne in the Bellevue Hospital, he having ranked second in a competitive examination for the vacant posts, and having gained a total of 34 marks out of a possible 35. At the time of his death he was serving as one of the temporary assistant sanitary inspectors under the Board of Health.

PROFESSOR CHARLES RICHET is engaged in producing a work entitled "L'Homme et l'Intelligence" which is to contain a chapter on the rights of man over animals (vivisection). Through the courtesy of the author we have been favoured with the proof of this section of the work. The views here expressed are quite in accordance with those which have been so frequently enunciated in the pages of THE LANCET. Richet argues that it is greater kindness and indicates a more intellectual humanity to make use of animals in the search after truth than to neglect such means, thereby abandoning all hope, or reducing that hope to the lowest ebb, of discovering facts which will prove of benefit to mankind.

A CORRESPONDENT writes that there have been very heavy floods in Surat during the present monsoon weather, and several thousand people have been left houseless and destitute. The river Taptee is still rising, while the rains continue heavy, and there is a probability of the place again being deluged. Forty odd thousand rupees have been subscribed in Bombay for the relief of sufferers in Surat. Besides the mortality created from the direct effects of the floods, there is unfortunately every likelihood of its being high from their indirect effects, such as privation, starvation, and epidemics.

MESSRS. CROOKES, ODLING, and TIDY, in their "Report on the Composition and Quality of Daily Samples of the Water supplied to London," for the month ending July 31st, state that "of the 182 samples of water submitted to examination, the whole, without exception, were clear, bright, and well filtered. In respect to aeration, and to general freedom from colour and excess of organic matter, they have maintained their excellent character; although, indeed, in one exceptional sample the proportion of organic matter present was in excess of what is customary at this season of the year."

WE are asked to state that during the Vacation, and consequent closure of the room of the Medical Union Society, members of the Union wishing to exchange or obtain books from the Society's library, or Messrs. W. H. Smith and Sons' circulating library in connexion therewith, can do so by applying to Mr. James Greenwood, hon. general secretary, at 3, King's Bench-walk, Temple, any day, Saturdays and Sundays excepted, between the hours of 10 A.M. and 4 P.M.

DR. DWIGHT is announced as the successor of Dr. Oliver Wendell Holmes in the Parkman Professorship of Anatomy in the Medical School of Harvard University. Dr. Dwight is the author of many important anatomical works, and the appointment appears to give general satisfaction to the profession in the States.

DR. TRIPE, medical officer of health for Hackney, who is carrying out a house-to-house sanitary inspection of his district, has found it necessary, in view of the facilities the proceeding affords to the designs of evil-disposed persons, to make a public intimation as to the necessity of householders requiring an official authorisation from individuals professing to be engaged in the work of such inspection.

THE Cavan guardians appear to be seeking to abolish the County Infirmary, and a meeting will be held next week, when the subject will be discussed. Institutions of this kind are of considerable utility, and perform good work, but are not regarded very favourably by a certain section of the community. An election for a medical officer has been fixed for the 25th proximo.

IT was rumoured last week that a death from cholera had taken place in Dublin; but on inquiry it was found that the statement was unfounded, the patient having died from an attack of typhus fever.

DR. DYCE DUCKWORTH has been elected to the post of Physician to St. Bartholomew's Hospital, in the vacancy created by the appointment of Dr. Southey as a Commissioner in Lunacy.

SIR SPENCER WELLS has been elected an Honorary Fellow of the Physikalish-Medicinische Society of Erlangen.

REPORT
OF
The Lancet Special Sanitary Commission
ON
PROBABLE CHOLERA CENTRES IN LONDON.

No. II.

THE fears entertained of a possible outbreak of cholera in London have so far only produced good results. The action of the local authorities has decidedly been quickened, and the sanitary staff in several instances increased. Thus, at Limehouse, where a house-to-house visitation was decided upon some time ago, an additional inspector of nuisances was recently engaged, so as to carry this work forward more rapidly. Nor is this inspection limited to the houses of the poor; it is extended to the few high-class dwellings of the neighbourhood—an example which should be followed throughout the metropolis. The revelations that have resulted from this systematic proceeding prove its utility, and many are the odd stories related by the inspectors. In one street a family and a pony were found living together in a cellar. Another cellar was occupied by a muffin-maker, who did not in the least realise the danger of conducting his business in such unwholesome quarters. Then there was another and very difficult case of overcrowding, not by human beings, but by cats. These cats were a nuisance to the neighbourhood, but the occupant of the house paid her rates so regularly that it was difficult to find legal means of proceeding against her. The appalling poverty that prevails throughout this district renders effective sanitation a matter of exceptional difficulty. Three localities are scheduled and condemned, but only one has been touched. The Brook-street area and the Nightingale area still remain, as striking mementoes of East-end poverty and wretchedness. In the former locality, Blue Anchor-alley, with its little houses built

back to back, so that there can be no through ventilation, and its swarms of half-naked children, sprawling amid the ruins of some houses that have literally fallen to pieces, presents a picture that will not be readily forgotten by visitors unaccustomed to such sights. But for a picturesque group of crumbling walls and noisome habitations we would particularly recommend Vine-passage.

On the south side of the High-street, Shadwell, we found a large dustyard and a bone-factory wedged in amid some poor dwellings. The stench was abominable and the subject of general complaint. Swarms of large blue flies from the dustyard and the factory worried the people who lived dangerously near to this source of infection. A great portion of the refuse was kept till it putrefied, and then carted into barges moored close at hand, thus aggravating the nuisance, and helping to contaminate the river as well as the streets. The local authorities maintain that they have no power to remove this nuisance, as it comes under the Metropolis Slaughter House Act of 1834, and existed previous to that date. The refuse from Bethnal-green, Poplar, and Limehouse is accumulated on this unsavoury spot, instead of being at once conveyed down the river, and far away from human habitations. This is a grievance that should be dealt with at once; and if the owners of these unwholesome industries cannot be expelled, they might be bought out.

Further down the river, where the Regent's Canal joins the Thames, in the locality known as Ropemakers' Fields, some extremely poor people live under very unwholesome circumstances. In Goodman's-rents, for instance, we found the walls wet from the water of the canal. There was no dustbin, but the dust was piled in a corner. When, however, the heap became a nuisance the refuse was scattered over some waste ground facing the houses, and there the wind took up the lighter particles and spread them over the neighbourhood. This primitive method of disposal of refuse has at least the charm of simplicity, but would perhaps be more appropriate if practised by Arabs when camping out in the Desert. Of the two closets provided for this small row of houses one was stopped up and overflowing. Of course, the stench was abominable. Close at hand, in White's-rents, the inhabitants complained very bitterly of a manhole in this little court, which poisoned them with bad odours from the sewer. This is particularly noticeable on Saturdays, when a large quantity of hot water is discharged into the sewer from the brewery that stands close by.

Leaving this district altogether, and taking a number of small streets that lie between Commercial-road and the Mile-end-road, many grave sanitary imperfections could be pointed out, though these are more or less the inherent consequences of poverty and the uncleanly customs of the population. Nevertheless, there are several defects which could be at once improved. For instance, we were surprised to find that a large number of houses had no dustbin whatever. Though we are not partisans of the dustbin, still we prefer this contrivance, with all its faults, to the mere piling of the dust in a corner of the yard, where every gust of wind takes up a certain proportion of the refuse, and throws it back into the houses or over the water tanks. In North-street and Carr-street we found this was frequently the case. The closets also were unprovided with water, and in one house, in North-street, though the earth had been dug up in various directions, no connexion between the closets and the sewer could be discovered. At the same time the kitchen of the house often smelt so unpleasantly that it was impossible to remain there for long, and one of the inmates, a child, had recently suffered from an attack of measles. In conclusion, we should urge the immediate construction of dustbins in the numerous East-end houses that have no provision for dust, and the more effective flushing of the closets in poor dwellings.

MONAGHAN LUNATIC ASYLUM.—It is proposed to expend £20,000 in providing extra accommodation at this asylum. A memorial requesting the Lord Lieutenant not to sanction the proposed outlay has, however, been forwarded by the Board of Guardians of Cavan Union.

A MILK contractor was fined last week in Dublin a sum of £20 for milk adulteration. The specimen examined was certified by Dr. Cameron to have been adulterated with 243 per cent. of added water—that is to say, that nearly two gallons and a half of water were added to one gallon of milk.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS TO THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Enteric Fever at Hitchin.[1]—At the request of the local board of health for this town the Local Government Board instructed Mr. Power to make inquiry into an outbreak of enteric fever there. Although this disease is not new to Hitchin, yet prior to November last there had recently been a total absence of any cases. But during that month enteric fever began to appear, and about mid-December came an epidemic which continued prevalent, with certain fluctuations, till the beginning of February, when it ceased almost suddenly. In all there were some 100 cases with seven deaths, the population of the town being 8434. Examination of Mr. Power's statistics shows that there were in the main two outbreaks. One began early in December, culminated about the middle, and all but died out at the end of that month. The second followed within a week, it reached its height during the fortnight ending January 20th, and died out by the first week in February. This behaviour of the disease, as Mr. Power suggests, tends to indicate a wide spread of the contagion on two separate occasions by one and the same mechanism. The inquiry proceeded on the lines usually adopted in such cases. The dates of attack of the members of the several households, their daily doings, facts as to drainage, water-supply, and such things were minutely investigated, and it soon became evident that some one general condition capable of producing enteric fever over a wide area and amongst all classes of the community would best explain the conditions under which the disease had been prevalent. The water-supply also came under suspicion. The fever was widely distributed, but still its incidence was limited. The town is divided into two parts, known as the St. Saviour's district, with a population of 1748 in 368 houses, and the St. Mary's district, with a population of 6686 in 1394 houses. Now the public water service, derived from certain springs, stored in an underground chamber, and conveyed to a pumping station by means partly of iron and partly of clay-socketed earthenware pipes, is distributed in both districts of the town, but in the St. Saviour's district well water is, notwithstanding, still largely resorted to. In this district there were but few cases of enteric fever, and in such households as were attacked the first patients were those who either did take the public service, or who had drunk from that service elsewhere than in their own houses, or had been in special relation with fever patients. And as the inquiry progressed it became more and more evident that the cause of the epidemic must be sought in something that could lead to a sudden and widespread dissemination of the poison. Such wholesale production of enteric fever could certainly have been brought about by a polluted public water-supply, and this opinion was not arrived at until such vehicles of infection as milk, &c., had been carefully eliminated as distributors of disease. At several points in its course to the town there were means by which the water could run risk of accidental contamination, and it was further ascertained that at the pumping station an eight-inch overflow pipe, contrived to convey surplus water from the receiving tank and pumping well into the river Hiz, permitted on occasions reflux of the river water into the tank. It also transpired that coincidence of two separate conditions was requisite for such backflow of the river water. These were: first, a rise in the river level; secondly, such reduction by pumping of the level of the tank water as to stay any overflow from it towards the river. In the winter just passed it was admitted that there had been special facilities for the coincident occurrence of these two conditions both on account of a modification in the pumping arrangements and otherwise; and, further, the defect was detected and at once stopped on January 13th, within about a fortnight of which date, as already explained, the epidemic came to an end. Now it would, according to Mr. Power, be difficult to over-estimate the

[1] To be had of Messrs. Knight and Co., 90, Fleet-street; Messrs. Shaw and Sons, Fetter-lane; Messrs. Hadden, Best, and Co., 227, Strand; and Messrs. P. S. King and Son, King-street, Westminster.

gravity of this defect. The river Hix is a mere ditch, receiving refuse matters liable to contain some of the most dangerous qualities of sewage, and Mr. Power himself observed near the overflow-pipe at the waterworks that the edge of the stream was littered with diarrhœal excreta cast out from neighbouring windows. When the river water made its way thus into the tank the town water became muddy, and until the defect was discovered the cause of this occasional muddiness was a mystery. Now, on December 30th, the river level rose rapidly, and could have passed into the tank, because the latter had been pumped out in anticipation of filling the service reservoir with a supply for Sunday the 31st, and it appears that on that day the water delivered from the public mains was thick and turbid. This would thus account for the outburst in mid-January, and looking to the very singular behaviour of the two outbreaks, a like causation as regards the earlier out-break may, notwithstanding absence of positive evidence, be probably regarded as all but proved. This assumption receives further support from the fact that the cessation of the first outbreak followed on a complete emptying and cleansing of the storage reservoir, which may be regarded as the storage reservoir of the fever material as well as of the water. On December 14th, within about a fortnight of that day, the fever which formed a part of the December outbreak had passed away. That all the fever in Hitchin was due to this one cause is not implied. The grave defects as regards the ventilation of the public sewers, and also as to the house drains, are precisely such as tend to convey the infection of such a disease as enteric fever into houses, when once the excreta have been passed into the main culverts. The defects in connexion with the water service have, we trust, already been fully remedied. Energetic and sustained action will still be needed to do away with the conditions favourable to the spread of any imported infection.

Diphtheria and Scarlet Fever at Sutton-in-Ashfield.—Last year Dr. Parsons reported on diphtheria in this place, there having been up to May, 1882, 39 cases in 30 households and 12 deaths. Scarlet fever had also prevailed, and had caused 27 cases in 18 households and 4 deaths. Since then, and up to April 14th last, there have been 87 cases of diphtheria in 61 households and 40 deaths, and 108 cases of scarlet fever in 49 households with 24 deaths. This list is also, it is to be feared, far from a complete one; but both the diseases have now apparently all but subsided. Little or nothing could, in the midst of such an epidemic, be made out as to the influence of school attendance, or as to the stocking trade, to which reference was made in the former report, in causing the spread of the disease, and it is the action of the sanitary authority which, in view of their previous experience, becomes of most interest. Astounding as it may appear, no hospital for infectious diseases was provided so long as the children were merely dying of scarlet fever and diphtheria; but, oddly enough, the moment small-pox appears, a disease against which another means of prevention is available, the resources, whether legal or not, of the sanitary authority are resorted to. In June, 1882, a case was imported from Nottingham, and immediately men were stationed at the door of the house to prevent ingress or egress. A temporary hospital—although a mere make-shift—was also fitted up, and a second imported case of small-pox was moved to it. The place has not, however, been used for the isolation of any case of the two diseases which have played such havoc in the district. The sanitary condition of the town, too, remains much the same. Over-full midden-privies, an unsatisfactory water-supply, obvious insanitary conditions, defective, untrapped, or blocked-up drains, dirty states of houses and out-premises, accumulations of refuse and sewage, flooded cellars, dampness of house-walls, and overcrowding were, says Dr. Parsons, "met with at many of the houses visited." Something, it is true, has been done, both as to water-supply and drainage; but the whole story is the reverse of creditable to local self-government in this Nottinghamshire town.

WATER SUPPLY OF LIMERICK.

The sanitary state of the town of Limerick is at present in a very unsatisfactory condition, the sewerage being very far from perfect, and should an epidemic visit the place the result would be disastrous. An important meeting of the Corporation has been convened for this week to consider a communication from the Local Government Board in reference to the water-supply and an application for money to purchase the present works.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 4988 births and 3039 deaths were registered during the week ending the 11th inst. The annual death-rate in these towns, which in the four preceding weeks had declined from 22·2 to 20·0, further fell to 18·4 last week, and was lower than in any previous week of this year. During the first six weeks of the current quarter the death-rate in these towns averaged 20·2 per 1000, against 22·9 and 19·6 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 11·0 in Halifax, 11·4 in Wolverhampton, 12·9 in Birkenhead, and 13·9 in Blackburn. The rates ranged upwards in the other towns to 23·1 in Sheffield, 23·6 in Salford, 23·8 in Manchester, and 26·2 in Liverpool. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 813, 747, and 661 in the three previous weeks, further declined last week to 601; they included 254 from diarrhœa, 108 from measles, 106 from scarlet fever, 50 from whooping-cough, 46 from "fever" (principally enteric), 29 from diphtheria, and 8 from small-pox. No death from any of these zymotic diseases was recorded last week either in Norwich or in Wolverhampton; whereas they caused the highest death-rates in Plymouth, Sheffield, Salford, Preston, and Liverpool. The deaths attributed to diarrhœa in the twenty-eight towns showed a further decline of 51 from recent weekly numbers; the disease was most fatal last week in Salford, Plymouth, and Preston. Five deaths in the twenty-eight towns were also referred to simple cholera or choleraic diarrhœa. Measles was proportionally most fatal last week in Salford and Liverpool; scarlet fever in Leeds and Sheffield; and whooping-cough in Salford and Derby. The 29 deaths from diphtheria included 21 in London and 2 in Manchester. Small-pox caused 2 deaths in London, 2 in Birmingham, 2 in Leeds, and 2 in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had been 55 and 48 on the two preceding Saturdays, rose again to 56 at the end of last week; 16 new cases were admitted to these hospitals during the week, against but 7 and 6 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had been 161 and 168 in the two previous weeks, rose to 181 last week, and all but corresponded with the corrected weekly average. The causes of 68, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Blackburn, and in four other smaller towns. The proportions of uncertified deaths were largest in Leicester, Bristol, Bolton, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 18·5 and 21·6 per 1000 in the two preceding weeks, declined again to 19·7 in the week ending the 11th inst.; this rate was, however, 1·3 above the mean rate during the week in the twenty-eight English towns. The rates in the Scotch towns ranged from 10·2 and 13·6 in Perth and Leith, to 24·7 and 28·4 in Glasgow and Greenock. The deaths in the eight towns included 109 which were referred to the principal zymotic diseases, showing a further increase of 17 upon the numbers returned in recent weeks; 48 resulted from diarrhœa, 20 from whooping-cough, 14 from "fever," 11 from scarlet fever, 9 from measles, 7 from diphtheria, and not one from small-pox. These 109 deaths were equal to an annual rate of 4·6 per 1000, which was 1·0 above the rate from the same diseases in the large English towns. The highest death-rates in the Scotch towns from these diseases last week occurred in Glasgow and Greenock. The 48 deaths attributed to diarrhœa showed a further increase upon recent weekly numbers, but were 13 below the number in the corresponding week of last year; 28 occurred in Glasgow and 8 in Edinburgh. The 20 deaths from whooping-cough, including 16 in Glasgow, showed an increase of 2 upon the number returned in each of the two previous weeks. The deaths referred to "fever," which had been but 3 and 4 in the two previous weeks, rose to 14 last week, of which 10 occurred in Glasgow and 2 in Greenock. Nine of the 11 fatal cases of scarlet fever occurred in Glasgow. The 7 deaths referred to diphtheria included 3 in Greenock, and 2 both in Glasgow and Paisley. The fatal

cases of measles were fewer than in any recent week. The deaths referred to acute diseases of the respiratory organs in the eight towns declined to 54 last week, and were 17 below the number returned in the corresponding week of last year. The causes of 77, or more than 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 22·7, 21·8, and 17·2 per 1000 in the three previous weeks, rose again to 20·9 in the week ending the 11th inst. The mean death-rate in the city during the first six weeks of the current quarter was 21·0 per 1000, against 20·7 in London and 17·0 in Edinburgh. The 140 deaths in Dublin last week showed an increase of 25 upon the low number in the previous week; they included 4 which were referred to diarrhœa, 4 to whooping-cough, 2 to "fever," 2 to measles, 1 to scarlet fever, and not one either to small-pox or diphtheria. Thus 13 deaths resulted from these principal zymotic diseases, against but 9 and 6 in the two previous weeks; they were equal to an annual rate of but 1·9 per 1000, the rates from the same diseases being equal to 3·5 in London and 3·1 in Edinburgh. The 4 deaths referred to diarrhœa and the 4 to whooping-cough exceeded recent weekly numbers. The 2 referred to "fever," however, showed a decline. The deaths both of infants and elderly persons showed an increase upon the low numbers returned in the previous week. Five deaths were referred to different forms of violence. The causes of 17, or more than 12 per cent., of the deaths registered during the week were not certified.

MORTALITY OF OCCUPATIONS.

During the quarter ended June 30th, the deaths in the Dublin Registration District amounted to 2674, or 30·6 per 1000. From the table constructed recently by the Registrar-General for Ireland, showing the occupations or social position of the persons whose deaths were registered during the quarter, it appears that the deaths in families of the "professional and independent class" were equal to an annual rate of 24·3 per 1000; in the "middle class" the rate was 26·8; among the "artisan class and petty shopkeepers" it was 23·6; and in the "general service class" and the "inmates of workhouses" combined it was as high as 38·6.

MEDICAL TRIALS.

SOUTHWARK COUNTY COURT.—FRIDAY, AUG. 3RD.

(Before Mr. HOLROYD, Judge.)

THE SOCIETY OF APOTHECARIES *v.* PEARSON.

THIS was an action brought by the Medical Defence Association in the name and with the consent of the Apothecaries' Company to recover £20 penalty against the defendant, Charles Pearson, a chemist carrying on business at 104, Stamford-street (and who is also district registrar of births and deaths), for acting as an apothecary without legal qualification. Mr. H. R. Hodson, barrister, instructed by Mr. C. J. C. Pridham, solicitor to the Medical Defence Association, appeared for the plaintiff society, and Mr. Washington, solicitor, of the firm of Messrs. Hicklin and Washington, for the defendant. Several technical objections by Mr. Washington on behalf of the defendant having been overruled by the learned judge, Mr. Hodson stated the case for the plaintiffs and called witnesses in support. From their evidence it appeared that the defendant was in the habit of making his daily rounds as a medical man, attending the sick at the bedside, sounding the chest, feeling the pulse, &c., and after his visits forwarding medicine of his own selection for their cure or relief. The defendant in his defence relied on the 28th section of the Apothecaries Act, contending that he had done nothing which exceeded the rights and privileges reserved to chemists by that section, and that chemists had always the right to prescribe in simple cases. He also relied on the fact that he was "a perpetual student" of Westminster Hospital, and attended the cases referred to in the plaintiff's evidence at the bed-side for the sake of acquiring experience.

The learned Judge found that the evidence proved that the defendant in the cases relied on by the plaintiff society had acted as an apothecary and not as a chemist. There would therefore be judgment for the plaintiffs for the amount claimed, £20, together with costs on the higher scale, as the issues involved were of public interest.

THE SERVICES.

Surgeon-Major R. Bowstead, F.R.C.S., of the Bombay Army, has been gazetted Officiating Principal Surgeon to the Goculdas Tejpal Hospital, Bombay, vice Surgeon-Major T. Cody, deceased.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Thomas Kingston, M.D., has retired upon temporary half-pay; Surgeon John Frederick Dowman has resigned his commission.

YEOMANRY CAVALRY.—Montgomeryshire: John Gill, Gent., to be Surgeon.

ARTILLERY VOLUNTEERS.—1st Edinburgh (City): James Maxwell Ross, Gent., M.A., M.B., to be Acting Surgeon.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Norfolk Regiment: Acting Surgeon Edward Fawcett, M.B., resigns his appointment.

ADMIRALTY.—The undermentioned Staff Surgeons have been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority as stated against their names: Henry Dawson Stanistreet, dated July 29th, 1883; John Horrocks, M.D., dated July 30th, 1883; William Bainbridge Fletcher, dated Aug. 1st, 1883.

The following appointments have been made:—Fleet Surgeon John Bucklay, to the *President*, additional, for temporary service at Deptford Victualling Yard during the absence of Fleet Surgeon Meiklejohn.

Correspondence.

"Audi alteram partem."

THE ETHICS OF NOTIFICATION.

To the Editor of THE LANCET.

SIR,—I should scarcely have supposed that any opinion which I may be reported to have expressed would have been worthy of a leaderette in THE LANCET if I had not seen it so commented on. I should also have thought that my advocacy of what I consider to be the right principle of notification was too well known by those who take an interest in this matter for them not to have perceived that there must have been some error in the statement. If you had reported the observations which I did make at the meeting of the Sanitary Institute, as well as Dr. Corfield's paper, it would have been unnecessary for me to trouble you with this communication, and the leaderette would not have been written. I am obliged to you, however, for the opportunity you give me of contradicting the report which I understand was published in one of the Sunday papers, but which I do not see, and have not yet seen. I stated very clearly to the meeting the views which I hold upon this matter, and gave the most emphatic objections to the private medical attendant being made a State official without his own consent. I did state that which I conceive to be the decided duty of the doctor when he is called upon to prescribe for a case of infectious disease—viz., that it is his bounden duty to inform the legal guardian of the case, or at any rate the person employing him to attend upon it, that the case was an infectious one, and that care must be taken by those in charge to obviate infection as regards the rest of the community. I stated that if a medical man failed to do this, he failed in a most essential part of his duty. That even if the householder or person in charge failed to make the communication to the local authority, the doctor could be put into the witness-box by the local authority, who would have a right to call him, and if he stated that he had not communicated the information, he would, to my mind, have been guilty of a much more serious offence than that of not informing the local authority, the object being repression of disease, not mere notification, which is being sought for. The judge before whom the case was brought would

by his reprimand be a greater terror to the ill-doer than a fine of 40*s.* could ever be, if the medical man is made a defendant as well as the householder, the fines in both cases being paid by the employer. I have no right to be surprised at your note upon the case, although I do take credit to myself for having been the first to sound an alarm among my practising *confrères* upon this point, and to show the evils which must follow if the medical man was made a co-defendant. The subject of notification by the medical attendant was discussed by the Social Science Association, and resolutions approving it were passed ten years ago. I was asked by the Council to read a paper upon the subject. The title of my paper was, "On the right of the State to obtain early information of the appearance of epidemic or infectious disease in a given district—Ought the medical attendant to be the informer?" That paper was read at Adam-street, Adelphi; and in 1876 it was commented on by the daily journals; and the arguments used in it have been some of the stock arguments which have been used ever since. Mr. Hastings has endeavoured to make the moral obligation to a private individual a public duty to the State, and to place the legal foot upon the neck of the doctor. I have opposed that action at meetings of the Social Science Association more than any other medical man, not even excepting Dr. Carter; I did this long before Dr. Carter or any of his colleagues took any part in the matter, as several letters in the medical journals and communications to *The Times* will prove, and which led to leading articles in that journal on the subject. If you will take the trouble to turn to the "Report of the Royal Commission upon Hospitals for Infectious Diseases," and will read the examination which most of the witnesses underwent at my hand, who were capable of giving useful information upon this point, with the object of showing that to enact such a law as that proposed by Mr. Hastings would, I believe, impede and not assist sanitary work, you will find that my antagonism prevented the Commission reporting in its favour. You will then understand my surprise at your remarks, and also, I hope, will be satisfied that the report upon which they were based is not true.

I take the liberty of sending you the papers of the sessional proceedings of the Social Science Association, which you will observe is dated April 29th, 1876.

I am, Sir, yours faithfully,

Croydon, August 13th, 1883. ALFRED CARPENTER.

*** Our readers will scarcely regret that our comment on what appears to have been an erroneous report of Dr. Carpenter's views has had the effect of eliciting the above letter.—ED. L.

CHOLERA.

To the Editor of THE LANCET.

SIR,—Statements of fact regarding the rise and dissemination of cholera are of great practical import at the present time; but it is essential that the experience of individual observers in one district or country should be carefully weighed in relation to the experience gained by competent observers in other districts and countries. In your issue of this week Dr. Roche, in his "Notes and Reminiscences of a Cholera Epidemic at Kotree," in the autumn of 1869, naturally confines his observations to what occurred there during the period, and asks your readers, on the data furnished by him, to decide some of the most practical questions regarding the disease. Now, what is the actual value of Dr. Roche's data?

1. Cholera appeared in an epidemic form at Kotree, on the Lower Indus, in September, 1869, and on a simple uncertified statement of events Dr. Roche claims to have established the fact that the outbreak was due to personal intercourse, association, and infection. But cholera broke out also in a severely epidemic form in September, 1869, far away on the Upper Indus valley at or about the exact time, and with equal severity on the Upper as well as the Lower Indus. All so-called first cases of cholera based on police reports in India have the same description, which, if closely inquired into by a competent committee, shows only too frequently that it is adapted to suit a preconceived idea of importation. If a person is seized with cholera, and if it can be ascertained that that individual has been in or near a cholera area, it is ordinarily assumed, without the slightest real proof, that this is the first case. When really thoroughly investigated, such first cases can often be demonstrated to be secondary cases. Doubt is at once thrown on Dr. Roche's statement regarding the first cases reported by his exaggerated endeavour to prove too much. Is Dr. Roche correct in stating that there was no defect in the water-supply of Kotree? Can such a statement be true of any village in India? Also in maintaining that there was no predisposing cause in existence at Kotree? Will any sanitary commissioner support Dr. Roche in such unqualified statements regarding the sanitary condition of any town or village in India?

2. Dr. Roche says there was no predisposing cause that could be discerned except in excess of rain and floods in the preceding months, and that the air in September was unusually still and moist; but these very conditions, which are strangely ignored to support the idea of contagion, have been followed in innumerable instances in India by severe local outbreaks of cholera. Besides the fact of severe outbreaks of cholera following floods, there is always the apprehension amongst civilians in Middle and Lower Bengal that cholera will appear with greater or less severity according to the extent of country and the period it is under water. There is almost a consensus of medical opinion on the same subject in the provinces mentioned. Therefore to ignore seasonal conditions, atmospheric influences, defective and impure water-supply, and every other insanitary condition which existed at Kotree, and exists in every town in India, in their influence on the rise and spread of cholera, and to base our ideas or views of cholera on the few unproved facts stated by Dr. Roche, would be to credit the profession with reasoning powers of a very limited order. Cholera, in fact, is essentially controlled and defined by seasonal, atmospheric, and other natural influences, and the history of all great epidemics of cholera shows its relative rise and decline within a fixed period, its latency more or less during winter, and its rise in spring, corresponding more or less, as we shall see later, with its behaviour in its so-called "home" in Lower Bengal.

3. Cholera, Dr. Roche states, is contagious. Did he thoroughly investigate personally and with European assistance the cases on which he founds his assertion? I have seen whole households of sorrow-stricken relatives attend on a sick relative with immunity. European husbands and others labour affectionately beside dying wives and children with immunity. From Peshawur to the banks of the Brahmaputra I have never seen a hospital assistant or attendant attacked. During the anxious period regarding which Dr. Roche writes—September, 1869—other officers beside myself went in and out amongst the cholera-stricken with immunity. Besides, the disease is considered so little contagious, so non-contagious in what might be considered the cholera lighthouse, a combined European and native station of Middle Bengal, that in the small European and native hospital there cholera cases were always removed to the hospital in the immediate vicinity of other patients for treatment with perfect immunity to other classes of patients, European hospital attendants, and natives for a period of four years. Is such experience consistent with the idea of contagion? It may be urged that every precaution is taken to prevent the spread of the disease amongst the European troops in India, particularly in hospitals; but though the small hospital was almost the only combined hospital in India where the European and native sick were treated in wards almost adjoining, yet cases of cholera amongst Europeans were almost invariably so badly attended that assistance had to be rendered by volunteers from barracks. Yet in no instance, as stated, was ever any attendant, whether native or European, attacked. It must be stated that the cases of cholera so treated in hospital were brought from localities beyond the hospital limits; for if cholera had appeared in the hospital in the first instance it would have been necessary, with our present knowledge of the laws under which the epidemic progresses, to consider the hospital itself an infected area, and to have cleared it accordingly.

4. Dr. Roche says cholera is liable to occur periodically about every ten years in some parts of India, and such an indefinite statement should not pass unchallenged. Cholera has no such relative periodicity in any yet published record. The disease prevails in a more or less virulent form in the spring and late autumn months, varying with seasonal changes every year in Lower Bengal, and frequently as an epidemic all over Bengal at varying periods.

5. Dr. Roche says it has a predilection for, or wears its virulence out amongst, a people. Cholera has no such predilection, save under exceptional conditions, and while in some years isolated cases occur in many villages, the disease has no tendency to become epidemic, as if it were controlled by some unknown influence; while in other years it will attack one village, carrying off a large percentage of the population, and a village in close relation with the other will entirely escape.

My fourteen years' study and experience of cholera throughout the whole of Bengal tends to the belief:—

1. That cholera is non-contagious in the accepted meaning of the term.

2. That there are infected areas in cholera epidemics beyond which there is more or less immunity; and, as in the hospital mentioned, perfect immunity during certain periods and epidemics. Such places, however, may have perfect immunity in some years, but none in others.

3. That there is a definite movement in a given direction in all epidemics, and in limited epidemics the movement is readily fixed, as it is in Egypt at the present, southwards; but influences, regarding which we know little, may alter that movement, rarely in a reverse direction.

4. The water-supply of the people does not affect, though it may modify, the progress of the epidemic; and the water-supply in Egypt now, as in Bengal, flows against the advancing epidemic.

5. That the extreme virulence of any cholera epidemic does not much exceed one fortnight in any given place, and, as in Damietta, a steady decrease in the number of cases will be noticeable after the period named.

6. Cholera does not necessarily advance in the line of direct human intercourse, and, as Alexandria has thus escaped hitherto, the epidemic influence has moved beyond, giving that important town an immunity likely to be maintained in so far as any virulent outbreak may be expected. Cholera, in fact, advances in the line it assumed in the first instance, and, except under extraordinary conditions, follows that line.

7. Cholera is endemic in India, particularly in Lower Bengal and along the line of the Gangetic Valley. There is a tendency to more or less defined periodic outbreaks in all places lying within this endemic area which is subject to the monsoon influence. The monsoon and other influences which affect the Gangetic Valley have a geographical limit to the West—namely, Meankier, Lahore, and Simla, where, as it were in a whirlpool, cholera rages with unwonted virulence in some seasons. Beyond the line of the monsoon at Mooltan, for instance, cholera is rarely epidemic.

In conclusion, cholera in Egypt is obeying the laws under which it is governed in India. It has appeared in a low-lying malarial track of country, is spreading in a definite direction southwards, is unaffected in its advance by the general water-supply of the country, is obeying the fortnightly law of periodicity in its rise and decline in particular areas; and in places like Alexandria and Port Said, lying on the eastern and western limit of the epidemic, the cases are few in number, because these towns are on the outskirts as it were. The epidemic, which is moving slowly onwards towards the Lybian and Nubian deserts, where, if aerial currents and other undefined influences were constant, as we know they are not, the dire pest would spend its power.

I am, Sir, yours truly,

GEORGE HUTCHESON, M.D.,
Surgeon-Major, Hill's Indian Medical Service.

Brighton, July 28th, 1883.

RUBINI'S TREATMENT OF CHOLERA.

To the Editor of THE LANCET.

SIR,—Having had much experience in the outbreaks of cholera and its treatment during a period of service in Turkey, and subsequently during ten years in India, I shall be glad if you will afford me space for a few comments on the above subject, as set forth in a letter by Messrs. Armbrecht, Nelson, and Co., in the *Morning Post* of the 4th inst., and again by Dr. George Moore in the same paper on Saturday last, some statements in which appear to me to be misleading and somewhat inaccurate. In the former letter it is stated that the homœopathic treatment of cholera is more successful than any other, and that in the hands of "intelligent laymen" it is equal to saving many lives, the assuaging of much suffering, and that only 16 per cent. of attacked die. Dr. Rubini says the only remedy which should be employed is camphor, and he claims to have cured every patient who came under his care by the "tincture of camphor" which bears his name. What that peculiar tincture may be we are not told; but if his cases were such as are now carrying off hundreds and thousands in Egypt, surely he should be sent there at once to administer it, or the drug should be procured at all costs for the use of the English and Egyptian doctors out there. If they were not, then certainly it is unjust to publish such statements, which are calculated to mislead the credulous and to cause needless anxiety. Assuredly, if there be any treatment which can give such results, it should be printed in letters of gold, and placed not only in the hands of every "intelligent layman," but in those of every layman, intelligent or otherwise. The treatment recommended in the first paragraph in the paper of the 4th is, I think, that usually received and adopted, except as regards withholding food and drink of all kinds, even water. Doubtless ice is most desirable, and with it stimulants may be given; but ice cannot always be procured, and then, to withhold good water would be, in my opinion and experience, both cruel and wrong. Then as to the other medicines recommended—cuprum aceticum, veratrum, &c.—it is in vain to hope that any efficacy can attach to their use. That Asiatic cholera is a morbific influence or poison (of the exact nature of which nothing definite is yet known), acting directly on the blood and nervous system, often with a suddenness almost electrical, there cannot be a doubt, and the true principles of all treatment in our present uncertainty as to the real nature of the malady must be to support the powers of life and to aid nature whilst combating the depressing influence of the poison in the system by restoratives and stimulants, both externally and internally; and amongst these, the hypodermic injection of ether and other stimulants during the stage of collapse offers, perhaps, some probability of success. Of preventive treatment, the lighting of fires in all buildings occupied, bonfires in camps, the burning of tar, sulphur, &c., and the destruction by fire of all densely crowded streets and alleys, are amongst the most useful.

I am, Sir, yours faithfully,

ARTHUR E. J. LONGHURST, M.D.

Wilton-street, S.W., Aug. 13th, 1883.

LENGTH OF INCISIONS IN OVARIOTOMY.

To the Editor of THE LANCET.

SIR,—I read Mr. Sydney Jones's paper on "Five Consecutive Successful Cases of Ovariotomy," in THE LANCET of the 30th ult., with, I must confess, a certain amount of astonishment. I refer to the length of his incisions. The length of the incisions in the five cases average 5½ in.; of course, such a length of incision facilitates the ease with which an operation may be performed; but what about the future comfort of the patients? Now, it may be presumption in me to say so, but I think such an incision as 6 in. unnecessary in almost any case, let alone in such a case as E. J., where the solid weighed only 1 lb. 10 oz. after the eighteen pints of fluid were removed. Think of the future trouble that E. J. may suffer with her 6 in. cicatrix, compared with a patient with a 2½ in. incision. The operations being done in hospital, doubtless Mr. Sydney Jones had several onlookers, and perhaps each of them carried away the idea that there must necessarily be a long incision in all ovarian cases, and so the long incisions are likely to be perpetuated as far as they are concerned. It has been my privilege during the last few months to have seen a very great many abdominal sections in Birmingham, both with Dr. Savage and Mr. Lawson Tait, and I here tabulate the last nine consecutive successful cases of ovariotomy I have seen under Mr. Tait. J. K., 2 in.; E. S., 1½ in.; E. L., 1½ in. (bad pelvic adhesion); E. W., 2½ in.; M. F., 3½ in. (both ovaries removed, bad adhesions); S. R., 2 in.; R. E., 1⅝ in. (dermoid); M. H., 1⅝ in.; J. P., 1⅝ in.; the total being 17⅜ in.; not quite 2 in. per case. These are not picked cases, but the last ovarian cases (all successful) I have seen. I may say that in small myoma cases Mr. Tait's incisions rarely or ever exceed 1½ in. Of course, it is more difficult to get hold of the tumour and break down adhesions with such a small opening, and here is the operator's skill, and the

benefit to the patient is incalculable, both in rapidity of recovery from the operation and her future comfort and safety. I also note that all the cases were dressed antiseptically, and in all of them the temperature was over 100° at some period after the operation. In No. 3 it was 101·2° once, and in No. 5, 101·4°. Neither Mr. Tait nor Dr. Savage uses any antiseptic whatever, and yet they hardly, if ever, have a case where the temperature reaches 100°. If all abdominal sectionists had my opportunities of seeing abdominal surgery as carried out by Mr. Tait and Dr. Savage they would relegate Listerism in that particular branch (however useful in other surgery) to the things of the past.

I am, Sir, yours obediently,

Leamington, August, 1883. EDW. M. OWENS.

P.S.—Mr. Tait, on Saturday last, in private removed an ovarian tumour that weighed 120 lb., and his incision for this was only 3¼ in.

FOOD IN OBSTETRIC AND GYNÆCOLOGICAL PRACTICE.

To the Editor of THE LANCET.

SIR,—Permit me to say a few words in reference to your editorial remarks in THE LANCET of August 11th on my address recently delivered at Liverpool on the question of food in obstetric and gynæcological practice.

The abstract of my address in THE LANCET of August 4th omits certain essential portions of the address; possibly your editorial remarks are based on that report. I subjoin two of the omitted paragraphs which bear on the criticisms you have made.

"It is pretty certain that the generalisation which applies to these classes of disease [cases occurring in obstetric and gynæcological practice] extends, or would be found to extend, to diseases of other organs of the body. ..... No doubt other organs of the body also suffer from deficiency in this article of diet [meat]. And I have abundant evidence that it plays a very important part in predisposing to the serious wasting diseases so often fatal in this country."

I am, Sir, yours faithfully,

Berkeley-square, Aug. 1883. GRAILY HEWITT.

"SCHOOLS AND SCARLET FEVER."

To the Editor of THE LANCET.

SIR,—A few weeks ago you referred in severe terms to the action of the School Board of this town in sending healthy children to make inquiries at the homes of absentee children. As a commentary, may I ask your attention to the accompanying report? I would ask you especially to notice the increased proportion of deaths from scarlet fever among children aged five to thirteen, the legal school age; and the fact that the deaths from this disease are almost exclusively confined to the families of working men, who are affected by the Elementary Education Act. The Health Committee here is not pleased that I should draw attention to these matters, and both it and the School Board say my reports are calculated to hinder the cause of education. With this I have, as medical officer, nothing to do. Were it necessary to decide between health and education, I would undoubtedly say there should not be a moment's hesitation in selecting the former. But there is no necessity to select one to the exclusion of the other.

The head-master of a Board School recently showed me a list of twenty-nine homes infected with scarlet fever connected with the school. The central office of the Board, however, would not learn of their existence for weeks after the master knew of them. Such is the system. I once reported myself to the Board a case in which a notice was issued by the Board to summon a parent for not sending a child to school, after a certificate had been forwarded to the Board that the child was kept from school because it was sleeping in the room with a brother who had scarlet fever. The explanation was that the officer who sent the summons did not know that another officer had received the certificate! This is an illustrative case of the happy-go-lucky style in which infectious disease is managed; and the result is that infectious disease is badly prevalent. I presented a special report to the Health Committee a month ago on the precautionary measures to be adopted. This was suppressed *in toto*, and not one suggestion was adopted. The chairman remarked that the disinfection, cleansing, repair, &c., I proposed would "make short work of £200"! This was a clinching argument against precautionary measures.

I do not think that the important point of the increased proportion of scarlet fever deaths among School Board pupils has ever been brought out before, though suspected.

I am, Sir, yours truly,

Sheffield, August, 1883. T. W. HIME.

FACTS ABOUT TYPHOID.

To the Editor of THE LANCET.

SIR,—An epidemic of typhoid, which I am pleased to say has subsided, has afforded me an opportunity of recording some few cases which, I think, may possibly be of interest to your readers. I well remember my esteemed old master, Professor Rainey, taken to task by my friend, a first-year's student, on some slight apparent discrepancy between his statements and what the text-book taught. For many months afterwards he would often turn to my friend in his ever kind but sarcastic way, and ask, "What do the books say, mister?" I almost think I might put the same query in regard to the following cases, and what would their answer be?

A. B., aged thirty, married, pregnant four months with her third child, had well-marked typhoid. Temperature 104°; pulse 120. Diarrhœa, spots, and deafness. Did not abort.

M. R., aged thirty-six, married, pregnant seven months with her fifth child, had well-marked typhoid, diarrhœa, spots, and deafness. Temperature 104°. Labour did not come on; went full term. The husband died with typhoid at the same time the wife was lying ill.

G. B., aged seventeen, M. B., aged thirty (mother-in-law and stepson), had well-marked typhoid. After the disease had been in existence for a week, the two youngest children, C. B. and E. B., were sent away into the country, a most healthy part, leaving the father and one child, F. B., and the servant to nurse G. B. and M. B. After an absence of five weeks and three days C. B. sickened with typhoid fever, as well as A. C., a child staying in the house where C. B. and E. B. were lodging. How can we account for the appearance of typhoid in the fresh locality—viz., after the lapse of five weeks and three days? I may here state that F. B., who had been left behind to nurse G. B. and M. B., or rather assist the nurse, went over to see her younger brother, C. B. This occurred three weeks before C. B. and A. C. sickened at all. During her stay of two days she slept with C. B. and A. C. F. B. had not been sick or sorry for a single moment. Might I ask, how did C. B. and A. C. get typhoid? Did C. B. have typhoid latent in his system, and so infect A. C., or did F. B. infect both C. B. and A. C.? What would the books say about infection here?

E. S., aged twenty-two, sickened with typhoid; symptoms well marked. There was not the least doubt as to the nature of the case, as three houses in the same row had typhoid fever; in none of these were diphtheritic symptoms present. After a lapse of seven days the patient complained of sore-throat. I may say I had examined the throat carefully during the week. The whole back of the throat was covered with a thin white film, having the most peculiar appearance, almost suggestive of a thin coating of milk, as if one could see through the thin membrane. It covered both tonsils, and extended into the uvula. The following day the membrane had become much more characteristic, and had extended over a considerable part of the hard palate. It was now yellow and much thicker, and no doubt could possibly be made in its diagnosis—typhoid complicated with diphtheria. The patient hovered between life and death for the next five days, at the end of which time the membrane had entirely disappeared, and only left the patient weak to struggle on against the typhoid fever. I cannot say whether the treatment used had anything to do with the almost magical disappearance of the membrane—viz., constant spraying the throat with lactic acid. The patient made an uninterrupted recovery when once the typhoid had reached the turning point. The temperature did not go beyond 105° at any time. The pulse once reached 140.

I am, Sir, yours truly,

July, 1883. MONTAGU H. C. PALMER.

SHIP-SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you allow me, through the medium of THE LANCET, to bring the following circumstances under the notice of any members of the medical profession who may be thinking of going to sea as ship-surgeons?

Last March I sailed from Liverpool to Calcutta as surgeon in a line steamer. Unfortunately I signed articles without having first seen the vessel, and on going on board I found there was not (as is the custom in nearly every other company) a regularly appointed surgeon's cabin. I mentioned this matter in the office, and was told that I would have one of the saloon cabins assigned to me, and that I would "be made comfortable." Things went on tolerably satisfactorily until on the voyage home at one of the ports touched at we embarked two or three additional passengers, when I was ordered by the captain to vacate my cabin and remove forward and share that occupied by one of the junior officers, a small, badly lit, and badly ventilated apartment. This proceeding was quite unnecessary, as we had only nine passengers on board and the ship is certified to accommodate twenty-one. I appealed to the captain, but obtained no redress, as he chose to appropriate for his sole use one of the largest of the saloon cabins, though provided with an excellent cabin for his special accommodation. To say nothing of the indignity put upon me by this transaction, I suffered by it great inconvenience and some actual loss. I had no place either to keep my medicines or to see patients; and when I mention that of the latter three were suffering from venereal disease, you will easily understand the necessity for some private place to see them in; additionally, owing to the very limited space, I had not sufficient room for my clothes, and was obliged to be a pensioner on the kindness of the occupants of other cabins for somewhere to put my things, some of which, in consequence of being so much scattered about, got lost, and others were damaged.

On arriving home I wrote to the owners, asking for some compensation for the treatment I had received and the loss I had sustained, and though I have written twice subsequently they have not thought fit to reply to my letters. I therefore feel it my duty to ask you to publish this statement in the hope that my unpleasant experiences may be the means of causing others who may sail as surgeons in line steamers to have a satisfactory arrangement beforehand as to their treatment and accommodation.

I am, Sir, yours obediently,

Dublin, Aug. 6th, 1883. E. H. LINDSAY, L.R.C.P. Edin.

AD CORRIGENDUM.

To the Editor of THE LANCET.

SIR,—Allow me to inform you that the quotation in THE LANCET of the 23rd ult. from the *Bombay Gazette*, does not convey a representation either accurate or adequate of the facts concerned. Had you been made acquainted with all the data regarding the matter in question (purely one of discipline) more reserve, I doubt not, would have been exercised before admitting into your columns so *ex parte* a statement as the one alluded to.

I am, Sir, your obedient servant,

Bombay, July 10th, 1883. H. V. CARTER, M.D.

*** We shall be glad to insert any statement Dr. Carter would like to make.—ED. L.

ON MILK DIET AND THE USE OF ANTIPYRETICS IN ENTERIC FEVER.[1]

[LETTER TO PROFESSOR GAIRDNER, BY J. W. ALLAN, M.B., SUPERINTENDENT AND PHYSICIAN TO THE CITY OF GLASGOW FEVER HOSPITAL, BELVIDERE.]

DEAR PROFESSOR GAIRDNER,—In reply to your note regarding the diet of enteric fever cases, I can only say that as yet I know of nothing which can take the place of milk. You taught us that milk was the food for fever patients, and my clinical experience has not shaken my faith in your teaching, but, on the contrary, has confirmed it. No doubt objections are urged against the use of milk in enteric fever, but I think that these objections either disappear or are reduced to very small bulk when closely investigated. As you ask for a short note, I shall be as brief as possible in discussing the subject.

Patients often object to milk. They say that it gives them "a bad taste in the mouth," that it makes the tongue and throat thick and glutty, and that it causes sickness. But we know that the "bad taste in the mouth" and the glutty state of the throat are due, not to the milk, but to the patient's condition. As to the sickness and vomiting, these may be due either to the irritable condition of the fever patient's stomach, or to the fact that pure—i.e., undiluted—milk or too much milk has been taken. If a person suffering from fever is allowed to slake his thirst with undiluted sweet milk, it is easy to understand that the overtasked stomach will soon reject its contents. It is clear that when the patient is thirsty the milk must be diluted with water, and this dilution must be in proportion to the patient's thirst. I do not think that any relative proportion can be fixed for the milk and water, nor that the amount of actual milk can be reduced to a hard and fast allowance. On these points, as in stimulation, "each case must stand on its own merits." But I should incline to put the maximum daily allowance of pure milk at, say, four pints. Of course it is clear that when a patient drinks little milk copious dilution is out of the question. When the patient's stomach is very irritable and vomiting persists, we add lime-water to the milk in varying proportion, from a tablespoonful to the mug up to "half-and-half." The results as a rule are satisfactory, and I think that this safe and simple remedy should never be forgotten. Soda-water in the milk is also good; ice is often very useful; but I have great faith in the value of lime-water in these cases. I have said that the patients often grumble against the milk. What would they like? Cold water, lemonade, &c. But we know that there is not much nourishment in water or lemonade. Certainly they could not take the place of milk. Occasional moderate drinks of cold, and more especially iced, water are very grateful, and I believe beneficial, to the enteric fever patient. Lemonade I fight shy of because some patients will not taste milk if they are indulged in lemonade, and I think the latter is apt to cause flatulence. It has been urged that milk in undigested curdy lumps and masses passes from the stomach into the bowels, and there gives rise to pain, flatulence, and severe diarrhœa. I do not doubt that this sometimes occurs, and I will even admit that in some cases such an occurrence may occasionally be unavoidable. But I am convinced that, as a rule, this misfortune is due to the same causes and is amenable to the same remedies as the vomiting to which reference has already been made. In a word, I think that when this happens the patient has been drinking rich or undiluted milk, or that he has loaded his stomach with too much at a time. The remedy is to dilute the milk, add lime-water freely, and to drink in moderate draughts.

I think that you, Sir, used to draw our attention to the familiar but instructive case of the teething child. The infant being out of sorts and irritable, the fond mother gives the unhappy little being the breast whenever it cries, the nipple being regarded as a panacea. We all know the results: vomiting, gripes, diarrhœa. It is simply an instance of a stomach overloaded with milk which cannot be digested, and is therefore got rid of by vomiting and purging. The case seems exactly parallel to that of the enteric fever patient who is gorged with pure milk.

We see that the patient frequently prefers water or lemonade to milk, but now let us ask what the physician would propose to substitute for milk. The reply seems to be "animal soups," let us say beef-tea and chicken soup. But neither chicken soup nor beef-tea is an equivalent for milk from a nutritive point of view, and patients in the acute stage of enteric fever do not generally relish these things; even very good beef-tea disgusts them; and we find that these soups have a very marked tendency to originate diarrhœa or to aggravate it if present. I am quite prepared to acknowledge that beef-tea and chicken soup may be admissible in enteric fever when cautiously administered along with milk: nay, more—I think they are useful in cases where constipation is a source of annoyance; but I am certain that they cannot take the place of milk, and in many cases their use is clearly contra-indicated for the reason already mentioned—viz., their tendency to cause diarrhœa. No one would seriously propose arrowroot or cornflour as substitutes for milk, although sometimes they may be added to beef-tea with advantage. We come back to this, then, I think, that milk is the staple article

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of diet in the acute stage of fevers, more especially enteric fever. In typhus and scarlet fever considerable latitude in diet may be permitted in some cases, even in the acute stage, such things as porridge and milk and tea and toast being frequently taken with relish, and apparently well borne and digested.

I may mention here, as an experience of this hospital, that if by accident our milk "turns," or we are disappointed in our supply, we are at our wits' end, for there is nothing that can take the place of the precious milk. And milk is not only a safe and suitable food for enteric cases; when diluted and iced, it is also a grateful drink, and it forms as well a valuable vehicle for stimulants, and even medicines. Where there is great prostration and exhaustion, egg-flip (composed of eggs, brandy, and milk) is excellent. Our experience clearly points to the fact that nothing but milk diet and fluids should be allowed till the evening temperature is steadily normal. If this rule is broken by way of concession to the patient's cravings for food "stronger" than milk, almost inevitably the penalty has to be paid. The temperature rises again; the patient is not so well; it may be that a "relapse" ensues. Chicken soup and arrowroot, or corn-flour and milk, are generally the first concessions in diet. Our nurses remark that common bread is very apt to induce a rise of temperature in the early stage of convalescence. The probability is that the patient "bolts" the bread without thorough mastication, and therefore it should not be given dry at first, but rather in the form of panada.

As regards the employment of antipyretics in enteric fever, I can only say that I have not much faith in the administration of such drugs as quinine and salicin. Of course, I do not mean to deny the interesting fact that these agents lower the patient's temperature, but I have not been able to satisfy myself that they really better the patient's condition. If the temperature went very high I might employ large doses of quinine or salicin, but in the great majority of cases I should certainly abstain from their use. I have no proof that they really improve the patient's state or shorten the course of the disease. Of the use of the cold bath in enteric fever, I have no personal experience, and therefore I shall say nothing concerning it. The warm pack has little or no effect in reducing the temperature, but I have found it to be a most valuable means of treatment in restless, irritable, delirious cases. The soothing effect is very striking. Sponging is a safe and simple method of relieving a feverish patient. Vinegar and tepid water may be employed. As a rule the process is enjoyed by the patient, who is cooled, soothed, and refreshed by the grateful application.

I have tried to keep to the two points indicated in your note—viz., milk diet and antipyretics in enteric fever. There is nothing new in my experience; I have made no discoveries; I am still guided by the old landmarks. In conclusion, I shall say that there *may* be a more suitable diet than milk for fever patients, but it has not been discovered as yet. Your affectionate old pupil,

JAMES W. ALLAN.

City of Glasgow Fever Hospital, Belvidere, Jan. 20th, 1882.

LIVERPOOL.

(From our own Correspondent.)

THE NEW HOSPITAL AMBULANCE.

A FEW weeks' experience of the new ambulance has sufficed to prove its value to the Committee of the Northern Hospital. With the assistance of the telegraph it has been brought ready to the scenes of several severe accidents within an almost incredibly short time, and patients with severe injuries have been removed in it to the hospital with as little suffering as was possible. It is to be hoped that the time is rapidly approaching when the ambulance will be an admitted necessity of every Liverpool hospital, and not, as at present, the luxury of one.

THE RECENT ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The fifty-first annual meeting of the British Medical Association has come and gone; and on the whole it has been generally considered a great success. The local papers commented very severely upon the disorder which prevailed at two of the general meetings. But it must be remembered, however much the disorder is to be regretted, that it would be impossible to introduce subjects of a similar burning character to homœopathy and the Contagious Diseases Acts among any body of professional men without even stronger expressions of disapproval; and considering how much there was to be done in so short a time, it seems only reasonable that the minority should give way to what proved to be an overwhelming majority. With these exceptions everything, from the opening service to the mayor's reception at the town-hall, was most harmonious as well as successful. Bishop Ryle, who has a son at Guy's Hospital, was particularly happy both in his sermon at the opening service and in his speech at the banquet.

DISPOSAL OF VEGETABLE REFUSE.

The discussion of this question at the Public Medicine Section was very opportune at the present time. In Liverpool it has not been found feasible to empty dry ashpits so frequently as is the practice in London and elsewhere. The result is that, unless vegetable refuse be burnt or mixed with a very large quantity of ashes, it becomes a most intolerable nuisance, as well as a source of danger. The general opinion of medical officers of health would appear to be in favour of burning; but the ordinary kitchen fires are ill-adapted for this purpose.

THE ASSIZES.

At the recent trial of the men arrested in Liverpool and St. Helen's, charged with treason-felony, Dr. J. Campbell Brown, of the Liverpool University College, and Dr. Dupré, of the Westminster Hospital, gave evidence as to the explosive nature of the material found in the possession of the prisoners. The former gentleman discovered, by experiments with some taps, also found on the prisoners, the means by which the explosion could be timed so as to occur after an interval sufficient to allow of the escape of the person depositing the explosive. One of the prisoners was acquitted, the others were sentenced to penal servitude for life.

GLASGOW.

(From our own Correspondent.)

THE ROYAL INFIRMARY.

AT a meeting of the Directors of the Royal Infirmary, Dr. James Provan was appointed to the recently created office of Dispensary Physician for Skin Diseases; Dr. John Barlow was elected Lecturer on Physiology, in the room of Dr. W. J. Fleming, resigned; while the other medical officers were re-elected.

HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES.

The question of the provision of adequate hospital accommodation for infectious diseases is one which at present attracts considerable attention here. A short time ago Dr. James B. Russell, medical officer of health for the city, issued a very interesting "Memorandum" on the subject, in which he states that "the aggregate fever requirements of Glasgow cannot be estimated at less than 550 to 600 beds." This is independent of 150 beds provided against small-pox. The aggregate hospital accommodation recommended by the Royal Commission for London equals 1·33 per 1000 of the population, with space to extend to 1·48; that now recommended for Glasgow is 1·31 to 1·41. Dr. Russell suggests that this accommodation should be supplied in the form of two separate hospitals of about 300 beds each. These suggestions have so far been responded to by the Town Council that arrangements have been made for the erection of additional pavilions in the grounds of the present fever hospital at Belvidere; this will enable the authorities to deal with 300 cases of fever. The 210 beds still required will be provided when a suitable site has been selected. A new departure is indicated in the published sketch of the official scheme above alluded to; it is proposed to erect at Belvidere two separate buildings for the accommodation of private beds for paying patients. These beds will doubtless be a great boon to many, especially of the "lodger" class, as nothing could, as a rule, be more wretched than the condition of those who have to depend on landladies for nursing in prolonged illness.

While engaged in the consideration of these and other health matters, the Town Council agreed unanimously in increasing the yearly salary of Dr. Allan, Superintendent

and Physician of Belvidere Fever Hospital. It is significant of the esteem in which Dr. Allan is very justly held that this increase was granted without the usual haggling and "bickering" so common at municipal meetings when matters of salary are under discussion.

VACCINATION DEFAULTERS.

During the last two years vaccination defaulters have been looked after in Glasgow by the sanitary inspectors, with very satisfactory results. On information received from the various city registrars these defaulters are followed up and brought within the operation of the Vaccination Act. It was found that in nearly all instances the defaulters were people who had changed their residence (and were thus difficult to trace), there being no systematic opposition to vaccination in Glasgow. As the result of this supervision by the sanitary inspectors, it is pointed out that while previous to 1876 the proportion of children born in Glasgow and not accounted for either by vaccination, death before vaccination, or postponement on medical certificate, was 4 per cent., this proportion has now been reduced to 2 per cent. In the rest of Scotland the proportion of children not accounted for under the Vaccination Act has increased.

SCOTTISH NOTES.

(From our own Correspondent.)

PROFESSOR M'INTOSH of St. Andrews, who has acted as medical superintendent of the Murthly District Asylum, near Perth, since its opening about twenty years ago, has now resigned. During last session leave of absence was granted by the directors that the professor might conduct his class. The management at Murthly has been most efficient and economical. In these days, when the rapacity of teachers is sometimes hinted at, it is worth while mentioning that in Professor M'Intosh's zeal for zoology he has accepted his new position at considerable pecuniary sacrifice. It is understood that a fitting successor to Dr. M'Intosh, and one most favourably known to the directors, has already presented himself.

COTTAGE HOSPITAL FOR DUNOON.

The Earl of Glasgow opened a bazaar, or "artistic fair," last week, held with a view to providing a cottage hospital for Dunoon and neighbourhood. Infectious diseases will not be admitted, but cases of ordinary illness and accident. About £1000 are required, and already handsome subscriptions are promised. The proposal meets the approval of the local medical men.

TYPHUS IN SKYE.

Mr. Masson, M.B., has written to state that the reported epidemic of typhus at Elgol in Skye is of a very limited character. Perhaps the worst element in it is the illness of Dr. Mackenzie, who caught the infection while on duty in the neighbourhood. The few cases are completely isolated, and tourists need have no fear in visiting this rugged district.

THE PROFESSORSHIP OF MEDICAL JURISPRUDENCE AT ABERDEEN.

The lengthy list of candidates for this chair has not altered since my last reference to the subject, and, as far as opinion in the profession may be noted, the only change seems to be in favour of Dr. Matthew Hay, of Edinburgh. I hear from a lecturer on medical jurisprudence that he is most anxious to have Dr. Hay as a fellow worker, feeling that his past opportunities have been taken advantage of, and that his future is of the most promising character. Dr. Angus Fraser has so far enlisted the sympathy of students and junior graduates, who have opportunity of knowing his excellent qualities, that already over 200 undergraduates have petitioned the University Court in his favour, and recent alumni are joining heartily to promote his election. With candidates like Drs. Beveridge, Fraser, and Hay, the University Court can scarcely go wrong in their selection; and friends of the medical school will expect a talented successor to one of the ablest medical jurists who ever occupied such a chair.

THE MEDICAL BILL.

So far as Scotland is concerned, the whole discussion of this Bill will hinge upon the constitution of the Divisional Board; but if that is seriously interfered with to satisfy the wordy warriors for the Corporations and bogus Fellowships, the university interests will give battle of such a strenuous kind as to jeopardise the passing of the measure this session. Mr. Mundella's plain speaking has possibly acted as a shower-bath upon the deputation detachments from the various Corporations, and at least proves that he is not to be hoodwinked by violent statements on the part of defeated candidates for professorships in institutions which seem now devoid of all merit. The speaking has been done by a few, and it is impossible to believe that the great body of extra-mural lecturers can suppose themselves injured by a Bill which places their students, for the first time, upon an equal platform with those from the universities. It should be distinctly remembered that it was only upon the constitution of the Divisional Board being arranged as it passed the Lords that the Scottish Universities became friendly to the measure, and that if this is interfered with their hands are again untied. Mr. Mundella and Sir Lyon Playfair will be able to show independent members that the present arrangement is eminently fair, and promises to work well for medical education in Scotland.

PARIS.

(From our Paris Correspondent.)

THE members of the scientific mission organised by M. Pasteur to study the nature of the cholera prevailing in Egypt only embarked on Friday, the 10th instant. It is to be hoped that they will yet reach there in time to fulfil their important mission.

M. LESSEPS ON RACIAL CHARACTERISTICS.

In presenting the fourth volume of "L'Histoire Universelle," by M. Marins Fontane, entitled "Les Asiatiques," at a recent meeting of the Academy of Sciences, M. de Lesseps made some very interesting remarks on the necessity of Governments having a thorough knowledge of the peculiarities of the different races that constitute a nation, taking into account their sentiments and passions, with the view of satisfying or combating them, according to the exigencies of civilisation, which, he said, was the basis of all good government and diplomacy. In the various revolutions that have taken place in the civilised world the populations have been moved by various impulses, which disclose the influence of the different races amalgamated on a given territory, each nation betraying certain aptitudes or inherent qualities which are more or less accentuated according to the difference of the races of which it is composed. In the volumes above referred to, M. Marins Fontane gives an account of the great current of emigration of the Phœnicians, consequently Asiatics, who, tormented by the Greeks, took possession of the Levant, gradually scattered themselves westward, and occupied the whole of the Mediterranean coasts, passed the Straits of Gibraltar, and great numbers of them, steering along the western coast of Europe, went as far as the "Cassiterides" Isles, and even to Great Britain. It is evident, concludes M. de Lesseps, that since those remote ages, there has been established in England a foundation of Phœnicians, whose mercantile impatience and exaggerations, with a certain degree of contempt for the rights of others, are occasionally manifested by the English, who, however, having a strong mixture of the Anglo-Saxon blood in their veins, possess the cool and calculating qualities of the latter, which have a counter-balancing influence, and enable them to master the most difficult social and international problems. This is very complimentary, but it is at the same time doubtless intended as a rebuke to the English, who are charged by the continental press in general, and that of the French in particular, with motives of mercantilism and egoism, as is said to have been manifested by them in Egypt both during the late war and at the present time, where they entirely ignore the sanitary laws established by the International Sanitary Congress which was held at Constantinople nearly twenty years ago. The French cannot get over the English evading the quarantine regulations; and although the note from the Foreign Office has been severely commented on in this country as being officious and presumptuous, it has had the effect of showing that the English were actuated by other motives than those imputed to them, and that their decision was based on scientific observations and experience.

THE NEW NURSING SYSTEM.

The impolitic measure of replacing the nuns of the hospitals by lay nurses has already produced evil results, but none has been more disastrous than that which has occurred in the Tenon Hospital, under the following circumstances:—On February 5th last, a girl, eighteen years of age, was admitted to the hospital with typhoid fever, which did not appear to be of a very malignant character. On the 13th the patient was ordered an enema of carbolic acid of twenty-five centigrammes, or about five grains, but instead of which an enema of forty grammes, or about an ounce and a half, was by an inadvertence administered to the patient, who was immediately seized with violent pains in the stomach and bowels, and she died a few hours after. Two nurses who attended the ward were sued before the Tribunal for manslaughter, or what, according to French law, is termed "homicide par imprudence." Both the women were culpable, as the one deputed the other to administer the enema, and both were condemned to imprisonment for fifteen days and to a fine of 30 francs each. The judge, in pronouncing sentence, severely reprimanded the doctor and pharmacien for the reckless manner in which the prescription was carried out, and condemned the whole system as at present in vogue in executing the orders of the physicians and surgeons in these establishments.

THE COUNT DE CHAMBORD.

A change for the worse has come over the condition of the Count de Chambord. The dyspeptic symptoms have returned with some intensity, and the debility and emaciation continue to increase, and it is reported that the illustrious sufferer has lost seven pounds in weight during the past week. Added to this, the Count has lost blood by the nose and by the intestines, and has become somewhat delirious. In short, the condition of the patient is such as to cause great anxiety, and his medical attendants are now less hopeful of his recovery than they have been hitherto.

THE CHOLERA IN EGYPT.

(From our Correspondent.)

UP to the morning of August 5th the total mortality from cholera officially reported was 17,140. Of that large number it is very noticeable that only a few hundred deaths have occurred in the towns and villages of the western part of the Delta, the enormous depopulation having occurred almost entirely in the Eastern portion in the towns dotted along the Damietta branch of the river, and in the provinces south of Cairo. Damietta lost 1950 out of its population of 35,000, and Mansourah 1074 out of 26,864, though it is generally avowed that it would be no exaggeration were one to double the number of deaths. I find that the highest daily mortality yet reported was on July 31st, when 949 persons died of cholera in Egypt. The latest reports give 903 on August 1st, 809 on the 2nd, 869 on the 3rd, and 797 on the 4th. In Cairo its virulence is rapidly abating; while 558 succumbed on July 23rd, the death-rate has almost steadily diminished, till on August 4th 174 deaths were officially reported. Among our soldiers dispersed to various encampments and stations from Cairo, more than 100 fatalities have occurred. Up to the present Cairo has lost 2 per cent. of its inhabitants, and Damietta 6 per cent., from the ravages of the disease. In the epidemic of 1865 Damietta lost more than 4 per cent. of its population, but whereas that epidemic began in Cairo on June 7th, it did not reach Damietta till August 14th—in fact, the place at which the cholera broke out this year was the last town at which it appeared in 1865. It is very interesting to compare the two epidemics in other points. Thus, the total mortality from cholera in 1865 was put down at 61,192; in this epidemic up to the present there have been 17,140 deaths. The maximum daily mortality in Cairo, with a population of 282,348, was 468 in 1865; this year, with a population of 368,000, it has been 558. Port Said in 1865 lost only 60 persons out of 57,000 inhabitants; this year again it has lost only 8.

I append a table of the epidemic of 1865:—

MORTALITY FROM CHOLERA IN EGYPT DURING THE EPIDEMIC OF 1865.

	Towns and villages.	Males.	Females.	Total.	Began.	Lasted.	Ended.	Population.	Rate per 1000.
	Cairo	3400	2704	6104	June 7th	92 days	Sept. 17th	282 348	21½
	Alexandria	2263	1755	4018	June 11th	69 ,,	August 19th	180,736	22¼
	Ramleh	43	40	83	,, ,,	69 ,,	,, ,,	—	—
	Agami	16	2	18	,, ,,	69 ,,	,, ,,	—	—
	Aboukir	13	10	23	,, ,,	69 ,,	,, ,,	—	—
	Rosetta	1069	1099	2168	June 16th	39 ,,	July 25th	21,130	107½
	Damietta	1128	1246	2374	August 14th	49 ,,	October 2nd	57,000	41½
	Port Said	50	10	60	June 28th	34 ,,	August 3rd	57,000	—
	El Arich	19	16	35	July 5th	83 ,,	Sept. 26th	—	—
	Suez	48	9	57	June 26th	41 ,,	August 7th	—	—
Provinces.	Mouderich Behera	1204	1038	2242	June 20th	91 ,,	Sept. 19th	—	—
	Garbieh	5805	4376	10181	,, ,,	83 ,,	Sept. 12th	—	—
	Menoufieh	1444	1204	2648	June 29th	74 ,,	,, ,,	—	—
	Dakahlieh	3858	3498	7356	June 22nd	42 ,,	August 3rd	—	—
	Charkieh	1903	1688	3591	June 21st	56 ,,	August 11th	—	—
	Kalioubieh	392	207	599	June 25th	72 ,,	Sept. 5th	—	—
	Beniseouf	513	518	1031	July 2nd	—	—	—	—
	Jayoum	718	588	1306	—	—	—	—	—
	Minieh	648	820	1568	June 30th	63 days	Sept. 2nd	—	—
	Assiout	2293	2094	4387	—	—	—	—	—
	Ghirjeh	2930	2845	5775	—	—	—	—	—
	Keneh	1581	1503	3084	—	—	—	—	—
	Grand total			61,192					

Mussulmans	59,104
Christians	1,978
Jews	110
	61,192

Maximum daily mortality.

Cairo	468
Alexandria	228
Damietta	172

Dr. Haddad sends an interesting report from Mahalla-Kebeers. This is a town with a population of 27,908, situated a few miles west of the Damietta branch of the Nile, and about twelve miles to the south-west of Mansourah. Cholera was reported to have broken out there on July 16th, and since then 651 victims have been reported; but this is stated, on the authority of persons on the spot, to be at least 50 per cent. under the true mark. The filth of the place is incredible, and its sanitary arrangements are conspicuous for their absence. Dr. Haddad has been there for eight days, and has pushed forward some valuable reforms, such as cleaning and disinfecting tainted houses, seeing that the excreta and the washings of the dead bodies are safely disposed of, insisting that the graves be of a reasonable depth, and, in fact, endeavouring in his own energetic way to combat uncleanliness, ignorance, and obstinacy. He has treated at Mansourah and Mahalla more than 200 cases. So-called "foudroyant" cases, as also

deaths from cholera without vomiting or diarrhœa, he does not believe in. He has seen no extraordinary cases. Those persons who die off rapidly are found always to have had severe watery diarrhœa for ten or twelve hours previously, unnoticed because painless, but a real part of the choleraic attack all the same. The shortest interval from perfect health to death he found to be about twelve hours, and this occurred in only two cases; the average duration was from twenty hours to three days. All the cases with irregular symptoms reported by other doctors have been proved to be cases of cholera with varying sequelæ. In the first stages the temperature is normal, in collapse subnormal (35·5° C. or more), and in the reaction stage there is pyrexia, the temperature reaching to 38° C., or even as high as 40° C. Petechiæ have never been found on the skin, the only spots being an occasional roseolar eruption in the stage of reaction. With regard to treatment, Dr. Haddad has had most success with the following: Cold or iced compresses spread over the whole abdomen, and changed every few minutes, generally at once check the vomiting; if the diarrhœa continues, an enema of laudanum stops it. If the tongue is foul one grain of calomel is given every hour. When cramps are severe, either a subcutaneous injection of ether or a chloroform and opium liniment affords relief. If the pulse becomes very weak, stimulants are required. Ice is given to suck freely. The inhalation of nitrite of amyl has been tried to stimulate the heart's action. Violent palpitation ensues for a time and then death follows. The experiment was made only on moribund patients and when every other suggested remedy had failed.

As to post-mortem appearances, Dr. Haddad reports from two necropsies to the following effect:—The mucous membrane of the stomach and intestines is very much congested, the upper part of the small gut appears red, the lower part of the small intestine and the whole of the large intestine is dark-green, almost black, and presents ecchymosed spots, at which the mucous membrane is denuded. The solitary glands and Peyer's patches are swollen and infiltrated. The intestines contain sanguinolent purulent fluid. The spleen is very small; the kidneys in one case being much congested; the bladder is empty and contracted; the brain is dry, with some fluid in the ventricles. The disparity between this account and the ordinary detailed morbid appearances lies in the description of the condition of the large intestine. Dr. Haddad is aware of the disagreement. He says the large intestine of a cholera patient is usually described as exhibiting no special characters, as undergoing only a slight change, or none at all; whereas in his two cases the large gut appeared to have been the chief seat of the disease, being dark-green, almost black and carbonised, the mucous membrane being denuded in large patches.

In respect of the state of matters in Alexandria, there is not very much to report. Up to last night the deaths from cholera have numbered 36, of which 8 occurred from 8 A.M. to 8 P.M. yesterday (August 5th). Since July 24th we have had one or more cases daily, several being refugees from Cairo attacked while undergoing their seven days' quarantine at Mex. A comparison between the progress of the epidemic here and at Cairo is instructive. In Alexandria there was a fatal case on July 2nd, on the 5th, on the 7th, on the 17th, two on the 24th, and a few daily since then. As to Cairo, five cases were notified at Gizeh (opposite Cairo) on July 15th, on July 16th there were four cases in hospital from different parts of Cairo, on the 18th there were 68 deaths occurring in seven quarters of the city, and the total mortality officially allowed in twenty days amounts to 5919, the popular estimate being very much higher. Thus, in Cairo the malady spread like a conflagration, in Alexandria it seems only to smoulder; and though it is probably dangerous to prophesy about a disease so uncertain and so notoriously capricious as cholera, a sanguine man is tempted to hope that its ravages here will be comparatively small. Among the deaths here, I am sorry to say that three have occurred at Ramleh Barracks amongst our unfortunate soldiers. The history of their illnesses is at least interesting. The first man attacked was a sergeant of exemplary habits who did duty in town. He had been ill with diarrhœa for two or three months, and went to the barracks at Ramleh for a week's holiday. After being there six days he suddenly became ill on the evening of Aug. 3rd, and was removed from his room into the hospital. Half an hour after removal he was seen by a surgeon familiar with cholera in India, who, observing his fingers contracted and his calf muscles hard, got him removed to the specially erected cholera hospital, and there he died next morning. A robust member of the Army Hospital Corps, who visited the sergeant frequently during his attack, was taken ill the same evening, and died the following day. The third victim was a 46th Regiment man, who was in hospital with diarrhœa, and whose bed was close to the first victim's during the latter's stay of half an hour in the ordinary hospital wards. The third man was attacked the same day that the second soldier died; thus one died on Aug. 4th, one on the 5th, and the third on the 6th. The illness of each lasted about twelve hours; they went very speedily into collapse with anuria and aphonia, the cramps and evacuations not having been very prominent symptoms. From what I have myself seen and heard the cramps do not seem to be severe, but the heart's action rapidly fails, the respiration becomes very shallow, the patient pulseless and voiceless in an extraordinarily short period, without apparently any great loss of fluid.

One does not hear so much now of the origin of the outbreak; still the battle is not ended, there is merely a brief truce, and hostilities will be vigorously renewed by-and-bye. It is to be hoped that a searching and unprejudiced inquiry by competent and impartial men will give some satisfactory result. Meantime Dr. Chaffey Bey, who was sent to Damietta by the Maritime Quarantine Sanitary Board, has published a pamphlet in which, among other things, he says that the state of Damietta was filthy and insanitary beyond description and credence. Dr. Hood's importation theory by a British steamer has been proved to be chimerical; and here for the present the matter rests.

Alexandria, Aug. 6th, 1883.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords, on Monday, Lord Northbrook, answering Lord Milltown, in a tone which was nearly inaudible, was understood to repeat the Government statement that it is not their intention to enforce the compulsory clauses of the Contagious Diseases Acts.

On Tuesday, the Diseases Prevention (Metropolis) Bill passed through committee, and the Cholera Hospitals (Ireland) Bill was read a first time.

The Medical Bill.

In the Commons on Friday, the 10th inst., Mr. Sclater-Booth gave notice of the following amendment as a new subsection of Clause 63:—"For the purpose of compiling the said Pharmacopœia there shall be established a Pharmacopœia Committee consisting of six medical practitioners, to be nominated by the Medical Council, and five pharmaceutical chemists, four to be nominated by the Council of the Pharmaceutical Society of Great Britain (one of the four to be resident in Scotland) and one by the Council of the Pharmaceutical Society of Ireland."

On Thursday, the 16th, Mr. Gladstone, in the course of a statement on public business, said it was intended to proceed with the Medical Bill on Tuesday, after the Lords' Amendments to the Agricultural Holdings Bills had been considered.—Sir Lyon Playfair asked whether an earlier day could not be named. The town was full of deputations from various parts of the country waiting for the Bill to come on.—Mr. Gladstone said the Government had made the best arrangements they could according to the time at their disposal, and he was afraid it was not possible, much as he regretted it, to name an earlier day for the Bill.—Dr. Lyons has given notice of the following amendment to Clause 16:—"Her Majesty in Council may nominate an eminent member of the Profession of Medicine in England, Ireland, or Scotland to be president of the Medical Council for such term of years as Her Majesty may be pleased to appoint."

Medical Baronetcies.

On Tuesday, a return was ordered, on the motion of Mr. Gibson, of names and residences of physicians and surgeons who since 1850 have received the honour of baronetcies or knighthoods.

Typhus in Skye.

The Lord Advocate, in reply to Dr. Cameron, said there had been twenty-five cases of typhus fever in Skye in about

five months. Three of the cases proved fatal. Dr. Mackenzie was lying dangerously ill of the disease.

Army Hospital Services.

In reply to Mr. Dawnay, Lord Hartington said he proposed as soon as possible after the session to examine carefully all the recommendations of Lord Morley's Committee, with a view to considering how far they could be adopted and given effect to in next year's estimates. He could not undertake with reference to the particular recommendations adverted to in the question that no steps should be taken for their adoption until the House had had an opportunity of discussing them, because action in this respect, as in all others, must be taken upon the responsibility of the Executive Government, and not of the House of Commons. No decision had yet been come to on the subject of particular recommendations.—Mr. Dawnay gave notice that on the first opportunity he could obtain next session he should call the attention of the House to Lord Morley's report.

Vaccination.

In reply to Mr. A. O'Connor, Lord Hartington said the alleged occurrences in Holland had not been brought under the notice of the War Office, but he would cause inquiry to be made into them through the Foreign Office. There was no intention of modifying or abolishing the system of vaccinating or revaccinating recruits, which, he believed, had acted most successfully in protecting soldiers from small-pox, and against which system, so far as he knew, no objection had ever been offered by the men. The regulation for the vaccination or revaccination of recruits was contained in the Medical Regulations of the Army issued under the authority of the Secretary of State.

On Thursday, Lord Hartington informed Mr. A. O'Connor that he was responsible for the regulations as to vaccination and revaccination in the army.—Mr. Hopwood asked the President of the Local Government Board whether his attention had been called to the cases of five children now suffering severely at Deptford from syphilis communicated by vaccination from one other child, and whether a public inquiry into those and any other cases in the neighbourhood would be directed.—Mr. G. Russell said this was no doubt a very distressing case, as the children were at present very ill, but there was no reason to suppose that they were suffering from syphilis. It appeared that four or five out of seventeen who were vaccinated suffered more or less from eczema, but they were all previously in a state of health that was most favourable to the development of that disease. There appeared to be no need for a public inquiry.—Mr. Hopwood asked if it was to be understood that the Government refused to hold an inquiry, notwithstanding the great amount of public feeling that existed on the subject.—Mr. Russell said the inspector of the Board had already inquired into the matter. There appeared to be no reason to doubt his professional opinion as to the non-existence of syphilis, and he thought no public advantage could arise from a public inquiry.—Mr. Hopwood asked whether it was a fact that the medical officer employed by the Board of Guardians certified that the disease was syphilis, and if so, whether that opinion had been communicated to the Board.—Sir C. Dilke: Perhaps my hon. friend will put a further question on this subject.—Mr. Hopwood assented.—Mr. Hopwood asked the President of the Local Government Board whether he was aware of the deaths of two children in Shoreditch, as their parents alleged, from vaccination.—Mr. G. Russell said the Board had caused inquiry to be made into the cases referred to. The deaths occurred from diarrhœa, and there was no idea of attributing the cause to vaccination. The medical officer at first stated that the lymph used had something to do with the death of one of the children; but he now denied that it could have anything to do with it. No irregularities had occurred; therefore no further inquiry was necessary.—Mr. Hopwood asked the President of the Local Government Board whether, in view of the sad casualties alleged to have attended vaccination, he had considered the appeal to him of J. A. Petvin, of the Axbridge Union, again summoned in respect of the non-vaccination of a child born in 1879, in respect of which he was three times summoned in 1882, twice convicted in full penalties, and paid three sets of costs.—Sir C. Dilke said the views of the Board had been communicated to the guardians by sending to them a copy of the Evesham letter.

The Artisans' Dwellings Improvement Acts.

In reply to Mr. F. Buxton, Sir C. Dilke said the Local Government Board on July 21st last addressed a letter to the urban sanitary authorities in the country calling their attention to the provisions of the Artisans' Dwellings Act. They had not received any communication from any local authority saying that it was their intention to take any further action under the Act. He was quite willing to lay the circular on the table of the House if the hon. member would move for it.

London Sewers.

Mr. J. Talbot asked the President of the Local Government Board whether his attention had been called to the exhalations which often proceeded from the ventilators of the sewers in the roadway of the streets of London, and whether he would cause inquiry to be made as to the possibility of carrying such ventilation above the street level by means of shafts.—Sir C. Dilke said it was the duty of the local authorities to attend to this matter. There was a difference of opinion about ventilating shafts arising out of the danger that might occur upon altering the present ordinary trap system, and of driving the sewer-gas into the dwelling-houses. That was so serious a danger that no system had yet been devised to meet the case.

Medical Organisation in Egypt.

Mr. D. Grant asked the first Lord of the Treasury whether an arrangement could be made to utilise our present medical organisation in Egypt to obtain the fullest knowledge of the disease.—Lord E. Fitzmaurice said Dr. Hunter had instructions to report on the whole subject of the cholera outbreak, and his report would be laid upon the table. One report had already been received, and would be at once presented.

The Regent's Canal.

In answer to Mr. D. Grant, Sir C. Dilke said if the condition of this canal was dangerous to public health, he was aware of no reason why the local authority should not proceed by law against the Canal Company.

The Indian Medical Service.

Mr. Gibson asked the Under-Secretary of State for India whether the Secretary of State for India intended to direct an inquiry into the grievances of the Indian Medical Service with a view to meet some of the expectations with which candidates were induced to enter it, and to restore some contentment to its ranks.—Mr. J. R. Cross said he had several times explained the cause of there being a temporary excess of medical officers who did not hold substantive appointments under the higher rates of pay, which was the grievance, he understood, to which the right hon. gentleman alluded, and he had also explained how the difficulty was being met. It was not probable that any inquiry would be made, nor was it proposed to make any change in the system.—Mr. Gibson gave notice that unless a remedy was provided in the meantime, he should at the earliest opportunity next session call attention to the grievances of the Indian Medical Service.

Obituary.

PROFESSOR N. A. PEDICINO.

THE Medical Faculty of the University of Rome has just sustained a severe loss by the death at Naples, on the 2nd inst., of Signor Nicola Antonio Pedicino, professor of botany at the Sapienza. He was born on July 12th, 1839, and soon distinguished himself in all the studies bearing on the science in which he became a master. In his twenty-eighth year he published at Naples "A Study on the Diatomeæ living near some Thermal Springs on the Island of Ischia." This was followed, in 1870, by "Notes on Algæ," and in 1873 by his "Observations on the Vegetation near the Baths of Ischia." His specialty lay in vegetable anatomy, to which he contributed "Studies on the Structure and Mode of Development of some Stems of Dicotyledonous Plants" (1876). He also wrote on "Impollination," treating more particularly of the "Thalia dealbata, Fras," and the "Limodorum abortivum, Wartz." At the time of his death he was engaged on works

on the "Araliaceæ" and on the physiology of Germination. He was for six years professor of botany at the Sapienza or University of Rome, and initiated the botanical lectureship in the school of higher agriculture at Portici. He did much to diffuse the doctrines of Darwin, and the writings of Hooker and other English botanists, among his compatriots, to whom he was otherwise endeared by his enlightened love of country and his large benevolence.

A. F. FISHER, M.R.C.S., L.S.A.

AT the age of seventy-eight has passed away one of the old generation of practitioners. Mr. A. F. Fisher practised in Biggleswade for forty years, till four years ago, when he disposed of his practice and retired. His manners were of the old school, gentle, courteous, and dignified, and he was respected by all. After getting out of harness he continued to have slight paralytic attacks, of which he had had a threatening some years before; and finally symptoms of cerebral softening appeared, so that for the last year of his life he recognised no one.

Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent Intermediate Examination:—

ENTIRE EXAMINATION.

FIRST DIVISION.

Adams, Charles Edward, University College.
Alcock, Samuel King, St. Bartholomew's Hospital.
Barendt, Frank Hugh, Royal Infirmary School of Medicine and University College, Liverpool.
Barratt, John Oglethorpe Wakelin, B.Sc., Mason and Queen's Colleges, Birmingham.
Braddon, William Leonard, Guy's Hospital.
Carless, Albert, King's College.
Corbin, Eustace Rhodes St. Clair, University College.
Dale, William Kelynack, King's College.
Davenport, Arthur Frederick, University of Edinburgh and University College.
De Chazal, Edmond Lucien, University College.
Gabriel, Leonard Maurice, St. Batholomew's Hospital.
Goodall, Edwin, Guy's Hospital.
Gow, William John, St. Bartholomew's Hospital.
Gray, John Power William, King's College.
Halstead, George Ezra, B.A., B.Sc., Guy's Hospital.
Hart-Smith, Franke Chamberlain, University College.
Hichens, Frank, London Hospital.
Hutton, John Stuart, St. Thomas's Hospital.
Johnson, Raymond, University College.
Jones, Sydney Harold, St. Thomas's Hospital.
Kidd, Hugh Cameron, St. Thomas's Hospital.
Larkin, Frederic Charles, Royal Infirmary School of Medicine and University College, Liverpool.
Lever, Frederick, Guy's Hospital.
Melson, George Hyde, Queen's and Mason Colleges, Birmingham.
Price, Alfred Edward, Guy's Hospital.
Stedman, Frederick Osmund, Charing-cross Hospital.
Stevenson, George, St. Bartholomew's Hospital.
Thane, Edgar Herbert, University College.
Washbourn, John Wychenford, Guy's Hospital.
Wild, Robert Briggs, Owens College.
Wills, William Alfred, Westminster Hospital.

SECOND DIVISION.

Aikin, William Arthur, Guy's Hospital.
Bailey, William Henry, St. Bartholomew's Hospital.
Barwise, Sidney, Queen's and Mason Colleges, Birmingham.
Bright, Eustace Frederick, University College.
Calvert, James, B.A., St. Bartholomew's Hospital.
Childe, Letterstedt Frederick, Guy's Hospital.
Clegg, Joseph, Owens College.
Edge, Frederick, Owens College.
Finley, Frederick Gault, Owens and McGill Colleges.
Gardner, Henry Willoughby, St. Bartholomew's Hospital.
Goodall, Edward Wilberforce, Guy's Hospital.
Harsant, Joseph George, Guy's Hospital.
Heatherley, Francis, Guy's Hospital.
Lawson, Robert, St. Thomas's Hospital.
Leech, Priestley, Owens College.
Marriott, John, Charing-cross Hospital.
Morison, Frederick William, St. Bartholomew's Hospital.
Mourilyan, Edward Pain, Guy's Hospital.
Muspratt, Charles Drummond, Guy's Hospital.
Napier, Francis Horatio, St. Bartholomew's Hospital.
O'Brien, Patrick Moriarty, Royal Infirmary School of Medicine and University College, Liverpool.
Pallthorpe, Mary Elizabeth, London School of Medicine for Women and Royal Free Hospital.
Prall, Samuel Esmond, Guy's Hospital.
Sutton, Alfred Martin, Guy's Hospital.
Thomas, Benjamin Wilfred, Charing-cross Hospital.
Walker, Alfred William Hinsley, Owens College.
Wethered, Frank Joseph, Bristol Medical School.
Williams, Patrick Watson, Bristol Medical School.

EXCLUDING PHYSIOLOGY.

FIRST DIVISION.

Wynter, Walter Essex, Middlesex Hospital.

SECOND DIVISION.

Ackland, Charles Kingsley, King's College.
Roberts, Edward, Guy's Hospital.
Taylor, Courtes Henry, King's College.
Williams, Reginald Muzio, St. Thomas's Hospital.

PHYSIOLOGY ONLY.

FIRST DIVISION.

Freeland, Freeland John, King's College.

SECOND DIVISION.

Carpenter, George Alfred, St. Thomas's Hospital.
Lankester, Alfred Owen, St. Bartholomew's Hospital.
Marriner, William Herbert Lister, St. Thomas's Hospital.

UNIVERSITY OF EDINBURGH.—The following candidates received on the 1st inst. the degrees specified:—

DOCTOR OF MEDICINE.

Allan, Francis John, Scotland.
Ashdown, George Wm. Wetton, England.
Bain, David Beattie, Scotland.
*Balfour, Isaac Bayley, D.Sc. Ed., Scotland.
*Barbour, Alex. Hugh Freeland, M.A.Ed., Scotland.
Baxter, William, Scotland.
Berry, John Bright, England.
Blaikie, Robert Henry, M.A. Ed., Scotland.
Cameron, John, Scotland.
Craig, James, Scotland.
Firth, Eustace, England.
Fraser, F. Wm. Dyce, M.A. Ed., Scotland.
*Fraser, James William, England.
Hartley, Alfred, England.
*Hassall, John, England.
Hern, John, England.
Illingworth, C. Rumney, Engld.
Johnston, R. M'Kenzie, Scotland.
Kay, Walter Smith, Scotland.
Lewis, Thos Preston, England.
M'Dowall, John Greig, Scotland.
Retief, Petrus Jacobus, Cape of Good Hope.
Robertson, Alex. Milne, Scotland.
Robertson, Jas. George, Africa.
Rose, Alex. Simpson, Scotland.
Smith, Thomas Henry, England.
Watkins, Arnold Hirst, England.
Waugh, John, M.A.Ed., Scotld.
Weight, Rowland Hill, England.
Wortabet, H. G. Luther, Syria.

DOCTOR OF MEDICINE (under the Old Statutes).

Reid, George More, Scotland.

BACHELOR OF MEDICINE AND MASTER IN SURGERY.

Addinsell, A. Whitehorn, Engld.
Aikman, Alfred, Scotland.
Aitken, Charles, India.
†Alexander, Geo. Forbes, Scotland.
Baily, Edwin, England.
Baily, Percy John, England.
Ballantyne, John Wm., Scotland.
Bancroft, Thos. Lane, England.
‡Barker, Theod. Hugh, Australia.
Barrett, Wm. Henry, Gibraltar.
Barron, Hunter Jackson, Engld.
Bennet, David George, B.A., New Brunswick, Canada.
Bett, Patrick Hunter, Scotland.
Bird, William, England.
Bowes, John, Scotland.
Broatch, Geo. Thomas, Scotland.
Brown, Charles, Scotland.
Brown, John Henry, England.
Buist, Andrew Crichton, Scotld.
Buncle, Thos. Marshall, Scotland.
Cardew, George Schuyler, India.
Caw, James Matthew, Scotland.
Chill, Edwin Albert, India.
Clark, Michael, England.
Clark, Ronald, Scotland.
Clemow, A. H. Wales, England.
Cobbett, Chas. Newberry, Engld.
Cockburn, Philip, Scotland.
Cocks, Horace, England.
Comber, Sidney Alfred, England.
Connor, Francis Gillies, Australia.
Cotton, William, M.A., Scotland.
Craig, James, Scotland.
‡Cumming, William, Scotland.
Dalgleish, James, Scotland.
Dalziel, Thos. Kennedy, Scotland.
Davies, Daniel Rees, England.
Davies, John, Wales.
Davies, Wm. Hugo, England.
Davison, Thos. Harrison, Engld.
‡Dochard, Arch. Telford, Scotland.
‡Donald, Archd., M.A.Ed., Scotld.
Dring, Herbert Johnson, Engld.
Drummond, Alex. Peters, Scotld.
‡Duff, William, Scotland.
Duncan, George, Scotland.
Dyson, Thos. Edward, England.
Evans, David Griffith, Anglesey.
Fletcher, Thos. Johnson, Engld.
Fordyce, B. Elphinstone, Scotld.
Francis, William Henry, Chili.
Fraser, Alex. G., M.A.Ab., Scotl.
Fraser, William Duncan, Wales.
‡Fuller, Arthur, England.
Gardiner, M. Henry, M.A.Glasg., Scotland.
Garman, Walter Chancellor, Eng.
Giddings, Robt. Ritchie, Engld.
‡Godfrey, F. W. Albion, Australia.
Gordon, Robert, England.
Gowans, Wm. Bruce, Scotland.
Greenbough, V. J., B.A.Cantab., England.
‡Grierson, Francis Walter, Scotld.
Gutteridge, Matthew W., Eng.
Hall, Francis James, England.
Hall, Fredk. Wm. George, India.
Handyside, Patrick Brodie, Scotl.
Hardie, Robert, Scotland.
Heath, James, Ireland.
Hector, Edw. Bateman, Scotland.
Helm, Robert Dundas, Scotland.
Henderson, Jno., M.A. Q.U.Irel., Ireland.
†Howlett, George, Ireland.
Hull, John Stonely, England.
Hill, Thomas Knight, England.
Hoyte, John, England.
Hunter, James, Scotland.
†Hunter, William, Scotland.
Hutson, J., B.A. Dur., Barbados.
Inch, Robert, Scotland.
Irving, Geo., M.A.Ed., Scotland.
Jackson, John Lowthian, Eng.
Jameson, Adam, Scotland.
Johnson, Samuel, India.
Jones, Chas Hampson, America.
Jones, F. Wm. Brandram, Eng.
Jordan, John Gregory, Calcutta.
Kelso, Jno. Edwd. Harry, India.
Law, John Spence, Scotland.
Lawry, T. Spencer, New Zealand.
Leslie, William Murray, Scotland.
Lestrade, Jos. Alex., St. Lucia.
Ley, Henry James, England.
Lightfoot, Charles Louis, Eng.
Lloyd, Hy. Sanderson, Australia.
Lorraine, R. T. Bell, Scotland.
Loudon, John Alfred, England.
Lyon, Thos. M. Murray, Scotland.
Macandrew, Herbert, New Zeal.
M'Clew, John Cowen, Scotland.
Macdonald, John, Scotland.
Macdonald, W. Fraser, Scotland.
Macfadyen, Allan, Scotland.
Macgregor, Alex. Duncan, Scotld.
M'Intyre, John Arch., Shetland.
Maciver, Francis A., England.
‡Mackay, George, Madras.
Mackay, Wm. Alex., Scotland.
†Mackenzie, Archibald, Natal.
Mackenzie, Robert, Scotland.
Mackinnon, F. Irvine, Scotland.
M'Lachlan, John, Scotland.
Maclagan, Chas. G., Berwick-on-Tweed.
M'Laren, Jas. Alex., Scotland.
M'Laren, J. S., M.A.Ed., Scotld.
Macpherson, Jas., New Zealand.
Malcolm, Wm. Aberdein, Scotld.
Matheson, Aug. Alex., Scotland.
Matheson, Farquhar Wm., Scotl.
Menzies, D., M.A. St. And., Scotl.

Miller, Alex. Cameron, Scotland
Miller, Ralph Smith, Scotland.
Miller, Wm. Henry, Canary Islds.
Milligan, David, Scotland.
Milne, James, Australia.
Mitchell, Robt. Peter, Scotland.
Moll, Pieter de Villiers, S. Africa.
Moody, Arthur Rowley, England.
Moore, R. J. Anderson, I. of Man.
Moorehouse, Benj. Michael, New Zealand.
Mukerji, Upendra Nath, Calcutta.
Munro, Andrew Watson, Scotld.
Murdoch, Alex. Brown, Scotland.
Murray, J. A. Johnston, Eng.
Myrtle, Andrew Scott, England.
Neale, John Headley, England.
Neethling, A. Murray, Cape of Good Hope.
Nicolet, Gustavus Paul, Belgium.
†Nieuwoudt, Gerrit, B.A., Cape of Good Hope.
Nisbet, John Tawse, Scotland.
Orr, John, India.
Orrock, George Dall, Scotland.
‡Owen, Owen R. Pughe, Wales.
‡Park, Geo., M.A. St. And., Amer.
†Paterson, Andrew Melville, Eng.
Petter, Walter, England.
Porter, William Ernest, England.
Price, Alex. Wm. Gordon, India.
Price, William Locking, India.
Priestley, Jos., B.A. Lond., Eng.
Roberts, James Black, England.
‡Robertson, J. Surling, M.A.Ed., Scotland.
‡Robertson, T. Murray, India.
‡Robinson, Arthur, England.
Ross, Chisholm, Australia.
Rothera, Frank, England.
Rowan, Henry Davis, India.
Savage, Mark Anthony, Ireland.
Scott, Harry, England.
Scott, Stanley, England.
Scott, Wm. Duncan, B.A.Oxon., Scotland.
Smith, Lloyd Grant, England.
Spence, Arthur Edw. Cecil, India.
Spence, William, Scotland.
Stables, Alexander, Scotland.
Stark, Arthur Cowell, England.
Steell, John, India.
Stein, Charles, Scotland.
Stevenson, Jas. Robt., Scotland.
Stiles, Arthur Jallard, England.
Sturrock, W. Malcolm, Scotland.
Sym, Allan Cuthbertson, Scotld.
Taylor, Geo. Peter, England.
Thomson, Andrew, Scotland.
Thomson, Daniel Gibson Pearce, Scotland.
Thomson, George, Scotland.
Vassie, Richard, Scotland.
Walther, John, England.
Ward, Allan Ogier, England.
Warner, Edw. Henry, England.
Watson, A. Oswald Cowan, India.
Watteville, Walter F. Rodolph de, Switzerland.
Wilkinson, Jas. Bates, England.
Wilson, Henry Arnot, Scotland.
‡Wilson, Jas. Thomas, Scotland.
‡Wilson, Theod. Stacey, B.Sc.Ed., England.
Witchell, Edwin Aubrey, Engld.
Wood, Alex. John, India.
Wood, Geo. Bennington, England.
Wood, Thomas, Scotland.
Yates, Peter, England.
†Younan, Arthur Chas., Calcutta.

* Obtained Prizes for their Dissertations.
† First-class Honours. ‡ Second-class Honours.

Scholarships &c. have been awarded as follows:—

EITLES SCHOLARSHIP FOR 1883, AND BEANEY PRIZE. — William Hunter.

BUCHANAN SCHOLARSHIP.—John William Ballantyne.

JAMES SCOTT SCHOLARSHIP.—George Forbes Alexander.

DOBBIE-SMITH GOLD MEDAL.—John R. Henderson.

UNIVERSITY OF ABERDEEN.—During the past year the following candidates received the degrees in Medicine and Surgery indicated:—

DOCTOR OF MEDICINE.

Barrett, John, M.B., C.M., Peninsular and Oriental Service.
Benham, Harry Arthur, M.B., C.M., Dundee Royal Asylum.
Cohen, Algernon Aaron, M.B., C.M., Burwash, Sussex.
Diack, Alex. Downie, M.B., C.M., Fort Beaufort, Cape Colony.
Gibbes, John Murray, M.B., C.M.
Gordon, Skene, M.B., C.M., South Africa.
Griffith, Alex. Hill, M.B., C.M., Royal Eye Hospital, Manchester.
Harvey, Robert, M.B., C.M., Professor of Midwifery in the Medical College of Bengal, Hon. Surgeon to the Viceroy of India.
Hawkins, Frederick Mortimer, M.B., C.M., London.
MacGregor, George Robert, M.B., C.M., Bingley.
MacQuiaban, Charles Mitchell, M.B., C.M., Aberdeen.
Ramage, John, M.B., C.M., British Seamen's Hospital, Cronstadt.
Reid, William, M.B., C.M., Kensington, London.
Richardson, Charles Beards, M.B., C.M., Brighton.
Ruxton, John, M.B., C.M., Blackpool, Lancashire.
Steel, William Dyne, M.B., C.M., Abergavenny.
Tulloch, David, M.B., C.M., Winnipeg, Canada.
Wallis, John Michael Augustus, M.B., C.M., Whittingham, Preston.
Wattie, Charles Lindsay, M.B., C.M., Inverkindie.
Willcocks, Alex. John, M.B., C.M., Bulandshaler, India.

BACHELOR OF MEDICINE AND MASTER IN SURGERY.

Baker, John, Aberdeen.
Beaton, Robt. Milne, Aberdeen.
Brown, Alfred, M.A., Welshpool.
Buchan, George, Aberdeen.
Cole, Sylvester John, Freetown, Sierra Leone.
Cook, Henri, Greenock.
Cowley, Alexander, Dublin.
Da Costa, Geo. Forsyth Ashley, Kingston, Jamaica.
Falconer, Francis, M.A., Aberd.
Fraser, Jas. Thomson, Longsight, Manchester.
†Gerard, John, M.A., Aberdeen.
Gibbons, H., Kurrachee, India.
Gordon, John, Aberdeen.
Grant, George, Keith.
Gregory, John, Bridge of Don.
Hosie, Andrew, Aberdeen.
Inglis, John, M.A., Aberdeen.
†Ireland, David, Brechin.
Jeffrey, Charles, Tarland.
Johnston, George, Fintray.
Johnstone, Thos. Malr, Elton.
Joseph, Louis, Colombo, Ceylon.
Kerr, John Bamford, Crawshawbooth, Manchester.
Knox, Alex. Walker, Aberdeen.
Logie, James, Huntly.
†Macdonald, J. Francis, Aberfeldy.
Maclennan, J. Norman Eassie, Lumphanan.
Mansfield, Cyril Jas., Ryde, Isle of Wight.
Matheson, John, M.A., Plockton, Ross-shire.
Maude, Fred., Highgate, London.
M'Combie, J., Oxton, Morayshire.
McKenzie, W., M.A., Fochabers.
Moffett, Grenville E., Calcutta.
Moir, James, St. Kilda, Victoria.
Moir, J. Drew, St. Kilda, Victoria.
Moir, William, Aberdeen.
Murray, James, Nairn.
Nicoll, Alexander, Rhynie.
Petty, David, Montrose.
*Prain, David, M.A., Pettercairn.
Purdy, Jas. Robert, Morpeth.
Rees, Richard, Aberdovey.
Reid, Jas. Robertson, Aberdeen.
†Rennie, Alexander, M.A., Wester Fintray.
Robb, James Taylor, Keith.
Ross, James Alex., Aberdeen.
†Scott, William, Auchairn, Keith.
Scroggie, John Geo., Aberdeen.
Sinclair, Wm. John Henderson, Dunbeath, Wick.
Smith, Alexander Gillespie, M.A., Torphins.
Smith, Jas. Lawrence, Aberdeen.
Stewart, William Allan, Buxburn, Newhills.
Still, George Cardno, Aberdeen.
Struthers, James, Aberdeen.
Taylor, James Longmore, M.A., Cullen.
Taylor, Jas., M.A., New Deer.
Thom, Alexander Philip, Durris, Kincardineshire.
Turner, G. J. Kemp, Ellon.
Turner, John, Portsmouth.
Vincent, G., Bedfont, Middlesex.
Walford, Robert, Colchester.
Whitehead, Arthur Meredith, Nottingham.

The following candidates were certified as having passed all the examinations, but did not graduate:—

Butchart, Charles Alexander.
Kelty, William.
Livermore, William Barclay.
Reid, Alexander.
Ruxton, William Lodingham.
Smith, Arthur Greatorex.

* Highest Academical Honours. † Honourable Distinction.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW. — During the April sittings of the Examiners the following gentlemen were admitted Licentiates of the Faculty:—

Baylis, H. M., Southport.
Belcher, William, Cork.
Coates, Gilbert H., Glasgow.
Edmiston, J. C., Rutherglen.
Harrison, John F., Manchester.
Hill, Alfred, York.
Hodges, Ralph W., Queenstown.
Holden, Wm. H., Bolton.
Jenkins, J., Ancaster.
MacMullan, J. H., Belfast.
Midwinter, E. Jas. H., Barnet.
Mowat, Thomas, Glasgow.
Praeger, E. A., Hitchin.
Ross, G. W. A., Glasgow.
Steele, R., Glasgow.
Walker, And. W., Edinburgh.
Willett, Henry, Great Budworth.

The following candidates have passed the Final Examination for the double qualification and been admitted Licentiates of the Faculty and of the Royal College of Physicians of Edinburgh:—

Cameron, Alexander, Glasgow.
Flitcroft, Thomas E., Preston.
Given, David K., Newtonstewart.
Gray, Thomas, M.D., Ontario.
Johnstone, Archd. S. T., Bridge of Allan.
Lappayah, Nannystamby, Ceylon.
Ling, Harold Charles, Glasgow.
Macfarlane, Thos. B., Glasgow.
Morris, Walter, Glasgow.
Metherell, Samuel A., Glasgow.
Quine, Richd. H., Isle of Man.
Urquhart, John C., Glasgow.
Watson, Henry O., Leeds.

ROYAL COLLEGE OF SURGEONS IN IRELAND. — At the recent examinations the following candidates obtained the licence in Surgery of the College:—

Frederick W. Allwright, George Browning, John J. Buggy, John V. Byrne, Alexander Carte, Robt. H. Clement, William Clifford, Arthur Cole, Geo. P. Cope, Richard J. D'Arcy, Laurence R. Deane, William Delahunt, Patrick Donnellan, Patrick Duff, John Foley, Thomas F. Griffin, Thomas G. H. Hall, Frederick S. Heuston, Andrew Hunter, Joseph P. Kelly, John M. P. Kennedy, Daniel Kenny, Nathaniel S. Manning, Jeremiah T. Martin, T. Martin, John Martin, Alfred H. Middleton, Thomas Moyles, Richd. Murphy, Andrew J. O'Flanagan, Joseph A. Purdon, William H. B. Robinson, George F. Roughan, Bartholomew Russell, Robt. W. Russell, William S. Sprent, Edward C. Stack, William L. Symes, Charles W. Wynne.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Aug. 9th:—

Bredin, Howard Albert, St. Edmund's road, Bootle, Liverpool.
Child, Herbert, Headingly, Leeds.
Lankester, Herbert Henry, High-street, Leicester.
Leeming, Robert Whinery, Holly Lodge, Buckhurst Hill, Essex.

The following gentleman also on the same day passed the Primary Professional Examination:—

Soden, Thomas Armand Bourne, Charing-cross Hospital.

THE vestry of Marylebone has made an order for the demolition of two houses in Horace-street, as being in a condition dangerous to health.

THE vestry of Mile-end Old Town has awarded to Dr. Corner, medical officer of health, the sum of £25 as bonus for extra services.

DEATH FROM THE STING OF A BEE.—A child, three years of age, has just died at Birmingham from, it is alleged, the sting of a bee upon the temple. Death ensued half an hour after the sting.

THE St. Bartholomew's Hospital Scholarship has been awarded to Mr. William Ludovic Darra Muir as the most successful candidate from Epsom College at the last preliminary scientific examination of the London University.

THE recrudescence of disease among cattle and sheep is exciting anxiety in various parts of the country. Foot-and-mouth disease has appeared in Derbyshire, Cheshire, and Bristol, and extra precautions are being taken to guard against the importation of infected animals.

BEQUESTS.—Mr. Wm. Goding, late of St. George's-place, Knightsbridge, bequeathed £200 each to the Brompton Consumption Hospital, St. George's Hospital, the Lock Hospital, and the Cancer Hospital.

FOR using improper mortar in the erection of houses at Highgate New Town, a builder has been fined £100. The magistrates thought a summons should be taken out against the defendant to compel him to pull the houses down.

ALEXANDRA PALACE.—A suggestion has been made by Mr. John Bourne, C.E., that part of the grounds of Alexandra Palace might be utilised as a winter garden and sanatorium. Dr. Richardson has, we believe, reported favourably of the feasibility of the plan.

CHILDREN'S HOSPITAL, PADDINGTON-GREEN.—The sanitary arrangements of this new hospital have, we are informed, been caried out under the direction of the Sanitary Assurance Association, of 5, Argyll-place, W., and at a meeting of the Council of the Association on Aug. 13th, Sir Joseph Fayrer, F.R.S., in the chair, the certificate of the Association was sealed.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the last meeting of the Council, Mr. John Whitaker Hulke, F.R.S., of Old Burlington-street, was elected an Examiner in Dental Surgery, in the vacancy created by the resignation of Mr. Holmes. The museum and library of the College will be closed as usual during the month of September for the necessary repairs, painting, and cleaning.

METROPOLITAN PAUPERISM.—The weekly return of metropolitan pauperism shows that there were in the fifth week of July 84,525 paupers, of whom 49,932 were in-door and 34,593 out-door. This is a decrease of 1294 as compared with 1882, but an increase of 220 and 1806 as compared with 1881 and 1880. On the last day of the fifth week of July 422 vagrants were relieved, of whom 278 were men, 126 women, and 18 children under sixteen years of age.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARFOOT, GEO. H., M.D.Lond., has been appointed Acting Medical Officer to the Wirral Children's Hospital, Birkenhead, vice Dr. J. Bell Miller, resigned.

BROUGHTON, HENRY TODD, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Heckmondwike Urban Sanitary District.

CLAY, CHALLONER, L.R.C.P.Ed. L.R.C.S.Ed., has been appointed Medical Officer for the Fovant District of the Wilton Union.

DOWSON, WALTER, M.A., M.B.Cantab., has been appointed House-Surgeon to the Salop Infirmary.

GUNN, R. MARCUS, F.R.C.S., M.B., has been elected Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

HEANE, WM. CRAWSHAY, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the Westbury-on-Severn Union.

LANE, J. LILLY, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Assistant-Physician to the Rotunda Hospital, Dublin.

LOANE, JOSEPH, M.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Assistant Medical Officer of Health for the Whitechapel District.

MACDERMOTT, RALPH JEAN, M.B., M.Ch.Dub., has been appointed Medical Officer for the Third District of the Petworth Union.

MOORE, E. E., M.B., has been appointed Resident Medical Assistant to Down District Lunatic Asylum.

OLPHERTS, J. WYBRANTS, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Downpatrick Dispensary District, vice Taylor, deceased.

OULTON, HENRY W., M.D.T.C.D., L.R.C.S.I., has been appointed Medical Officer for the No. 1 North City Dispensary, Dublin.

PAGE, FRED. MATTHEW, L.R.C.P.Ed., L.R.C.S.Ed., has been re-appointed Medical Officer for the Bilton District of the Keynsham Union.

PEDLEY, F. NEWLAND, M.R.C.S., L.D.S., has been appointed Dental Surgeon to the Evelina Hospital, vice Mr. Isidore Lyons, resigned.

POTTER, JOHN BAPTISTE, Obstetric Physician to the Westminster Hospital, has been appointed Consulting Obstetric Physician to the Western Dispensary, vice Geo. Fenton.

SUTTON, FRANCIS W., M.R.C.S., L.S.A.Lond., has been appointed Assistant-Surgeon to the Royal Berks Hospital, vice Workman, resigned.

WILLIS, GEO. OWEN, L.R.C.P.Ed., L.R.C.S.Ed., F.F.P.S.Glas., has been appointed Medical Officer for the Greys District of the Henley Union.

Births, Marriages, and Deaths.

BIRTHS.

ANDERSON.—On the 8th inst., at Spennymoor, Durham, the wife of Robert S. Anderson, M.B., of a son.

CHITTY.—On the 3rd inst., at Crouch-end, the wife of A. Goldney Chitty, M.R.C.S., L.R.C.P., of a daughter.

EXHAM.—On the 3rd ult., at Lucknow, the wife of Richard Exham, Surgeon-Major, Army Medical Department, of a daughter.

GRAHAM.—On the 2nd inst., in Sumatra, the wife of J. Campbell Graham, M.D., M.A., L.R.C.P.Ed., of a daughter.

GREEN.—On Wednesday, the 8th inst., at 116, Stricklandgate, Kendal, the wife of T. Beaufoy Green, M.R.C.S.Eng., of a son.

GRIMSHAW.—On the 8th inst., at Priorsland, Carrickmines, co. Dublin, the wife of Thomas Wrigley Grimshaw, M.D., of a daughter.

HILL.—On the 11th inst., at Oak House, Tufnell-place, Holloway, the wife of J. R. Hill, L.R.C.P., of a daughter.

ROSS.—On the 14th ult., at Whiteparish, Wilts, the wife of R. Alexander Ross, M.R.C.S., L.S.A.Lond., of a son.

SMITH.—On the 9th inst., at 1, Bertie-terrace, Leamington, the wife of Francis William Smith, M.D., of a daughter.

MARRIAGES.

BARLOW—SCHONE.—On the 14th inst., at St. Thomas's, Leipzig, by the Rev. Dr. von Criegern, Thomas Carey Barlow, L.R.C.P.Edin., of Dalston, London, to Liddi, only daughter of the Königl Brandrer-sicherungs-Inspectors v. Schöne, of Leipzig.

BUNN—ROPER.—On the 11th inst., at St. Peter's-in-the-Wood, Guernsey, Charles Grisling Bunn, L.R.C.P., M.R.C.S., to Edith Annie, elder daughter of Charles Roper, of South Kensington.

FERGUSON—IRVINE.—On the 8th inst., at Mossley-hill Church, Liverpool, Thomas Leslie, only son of the late James Chambers Ferguson, M.D., to Eleanor Jane, daughter of the late George Irvine, Bruckley House, Mossley-hill, Liverpool.

LORY—ALFORD.—On the 14th inst., at Mangotsfield, by the Rev. A. C. Alford, Rector of Aston Sandford, Bucks (brother of the bride), assisted by the Rev. F. A. P. Lory, Vicar of Bagshot (uncle of the bridegroom), William Manley Lory, Surgeon R.N., eldest son of Charles Marsh Lory, of Staple Hill Lodge, near Bristol, to Florence Bertha, younger daughter of the Rev. George Alford, Vicar of Mangotsfield, Gloucestershire.

MATTHEWS—KENT.—On the 1st inst., at Collegiate Church, Neuchâtel, Joseph Matthews, Surgeon, Waterloo, Liverpool, to Margaret, youngest daughter of John Calvin Kent, of Waterloo.

PECK—OWEN.—On the 11th inst., at the Church in Gordon-square, Awdry Peck, B.A. Oxon., L.R.C.P.Lond., M.R.C.S.Eng., of 37, Torrington-square, W.C., to Ethel, eldest daughter of David Henry Owen.

RENNER—SMITH.—On the 7th inst., at the Parish Church of St. Helier's, Jersey, by the Rev. P. A. Le Feuvre, Vice-Dean, William Renner, M.D., M.R.C.S., of Freetown, Sierra Leone, to Elizabeth (Bessie), eldest daughter by his second wife of William Smith, Esq., of Kenmuir, Jersey, late of the Mixed Commission Courts, Freetown, Sierra Leone.

THORPE—MARSH.—On the 8th inst., at St. George's, Sheffield, George E. Knight Thorpe, M.R.C.S., Sheffield, son of the late G. B. Thorpe, F.R.C.S., of Staveley, Derbyshire, to Edith Anne, younger daughter of the late Theophilus Marsh, of Sheffield.

WAGSTAFFE—TETLEY.—On the 8th inst., at all Saints', Branksome-park, Bournemouth, William Warwick Wagstaffe, B.A., F.R.C.S., late of St. Thomas' Hospital, to Helen Mary, daughter of the late Francis William Tetley, Esq., of Fox-hill, Westwood, near Leeds.

DEATHS.

ARROTT.—On the 13th inst., at Almond Bank, Perthshire, James Arrott, M.D., late of Dundee, aged 76. Friends will please accept of this intimation.

AXFORD.—On the 8th inst., at Sunnyside, Oldfield-park, Bath, after a lingering illness, Richard Axford, M.R.C.S., J.P., late of Bridgewater, Somerset, in his 65th year.

HARRISSON.—On the 11th inst., at Gunnersbury, Henry Harrisson, M.R.C.S., late of Upper Montagu-street, W., aged 72.

MCOSCAR.—On the 8th inst., at Argyll-street, Regent-street, John McOscar, M.D., aged 56.

SOUTHBY.—On the 10th inst., at Bulford House, Wilts, Anthony Southby, M.D., aged 83.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, London.

A Text-book of the Practice of Equine Medicine. By William Robertson, F.R.C.V.S. pp. 806.

BLAKISTON, SON, & CO., Philadelphia.

A Guide to the Practical Examination of Urine. By James Tyson, M.D. Fourth Edition, Revised and Corrected. pp. 196. Illustrated.

CHURCHILL, J. & A., London.

The Book of Prescriptions, containing upwards of 3000 Prescriptions. By Henry Beasley. Sixth Edition. pp. 593.

Descriptive Catalogue of the Pathological Specimens contained in the Museum of the Royal College of Surgeons. Second Edition. Vol. II. pp. 527.

CLARKE & Co., Cincinnati.

A History of Tuberculosis from the time of Sylvius to the Present Day; a Translation, with Notes and Additions, from the German of Dr. A. Spina. By E. E. Sattler, M.D. pp. 191.

DAWSON BROTHERS, Montreal.

Excision of the Knee-joint, with Report of Twenty-eight Cases. By Geo. E. Fenwick, M.D., C.M. pp. 68. With 13 Photo-lithographs and Woodcuts.

LEWIS, H. K., London.

Enteric Fever, its Prevalence and Modification, Etiology, Pathology, and Treatment. By Francis H. Welch, F.R.C.S. pp. 190.

The Extra Pharmacopœia of Unofficial Drugs and Chemical and Pharmaceutical Preparations. By William Martindale, F.C.S. With references to their use abstracted from the medical journals, by W. W. Westcott, M.B.Lond. pp. 313.

Hammam Rirha, Algiers, a Winter Health Resort and Mineral Water Cure combined. By G. H. Brandt, M.D. pp. 44. With Map.

LONGMANS, GREEN, & Co., London.

Elementary Treatise on Physics, Experimental and Applied. Translated and Edited from Ganot's Éléments de Physique, by E. Atkinson, Ph.D., F.C.S. Eleventh Edition, Revised and Enlarged. pp. 1005. With 5 Coloured Plates and 898 Woodcuts.

MITTLER UND SOHN, Berlin.

Jahresbericht über die Leistungen und Fortschritte auf dem Gebiete des Militär-Sanitatswesens. Bearbeitet von Dr. Wilhelm Roth. VIII. Jahrgang.

NEW SYDENHAM SOCIETY, London.

An Atlas of Illustrations of Pathology. Fasciculus V.: Diseases of the Liver. Plates 23 to 26.

PRATT, THOMAS, London.

The Degrees, Gowns, and Hoods of the British, Colonial, Indian, and American Universities and Colleges. By the Rev. T. W. Wood. pp. 36.

STEVENS & SONS, London.

Reports of Trials for Murder by Poisoning. With Chemical Introduction and Notes on the Poisons used. By G. Lathom Browne, Barrister-at-Law, and C. G. Stewart. pp. 604.

Note sur Vingt-deux Opérations de Goître; par Prof. Jaques-Louis Reverdin.—Knapsack Handbook, or Pedestrian's Guide; by William White, A.C., F.S.A., &c. Second Edition. (E. Stanford.)—Æsthetical Sanitation; by W. White, F.S.A. &c. (E. Stanford.)—O Iodoformio em Cirurgia; pelo Dr. P. S. de Magalhães.—Hints on the Treatment of some Parasitic Skin Diseases; by G. H. Rohé, M.D.—Pemphigus and the Diseases liable to be mistaken for it; by the same Author.—Treatment of the various forms of Acne; by the same Author.—Extirpation of the Uterus; by P. de Vecchi, M.D.—Balneologische u. Wiesbaden; von Dr. Emil Pfeiffer.—Remarks on the Remedy for Typhus; by T. F. Morrish, M.R.C.S.—Prognosis in Cases of Refusal of Food; by Henry Sutherland, M.D.—An Abstract of the Medical Act Amendment Act, 1883; by William Berry. (Starr, Wigan.)—Proceedings of the Society for Psychical Research, April. Second Edition.—Longman's Magazine, August.—Index Medicus, Vol. V., No. 6. (Leypoldt, New York.)—Home Nursing and Sick-room Appliances; by Eva C. E. Lückes. (Kegan Paul & Co.)—Epping Forest and its Management; by Alex. Mackenzie.—Zeitschrift f. Biologie; von W. Kühne und C. Voit. XIX. Band, 2 Heft.—Health Lectures for the People, delivered in Manchester, 1882 and 1883.—The Operative Treatment of Hare-lip; by James Whitson, M.D. &c.—Good Words, Sunday Magazine, August. (Isbister.)—Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, Friendly Greetings, August.—Fortnightly Review, August.—The American Journal of Neurology and Psychiatry, May.—Experimental Researches on the Tension of the Vocal Cords; by Dr. F. H. Hooper.—Nasal Cough, and the Existence of a Sensitive Reflex Area in the Nose; by Dr. J. N. Mackenzie.—Guatemala: an Address delivered at the California Medical Society by the President, Dr. L. C. Lane.—Holiday Handbooks: The Moselle, Holland, The Ardennes; edited by Percy Lindley.—El Cólera y su Tratamiento; por el Dr. G. Sentiñon.—Proceedings of the Society of Psychical Research, July.—Présence de Bactériens dans le Sérosité Péritonéale de la Hernie étranglée et de l'Occlusion Intestinale; par le Dr. G. Nepyus.—Diagram of Pathogenic Organisms; by A. Barron, M.B.Lond., and F. W. Mott, M.B.Lond.—Popular Account of the Fish's Nest built by the Stickleback; by S. Wilkins and T. Bolton.—Dwellings and the Death-rate of Manchester; by Dr. A. Samelson.—Die Elektro-Medicin in der Internationalen Elektricitäts-Austellung zu München im Jahre, 1882; von Dr. R. Stintzing.—On the Natural History of Dysmenorrhœa; by John Williams, M.D., F.R.C.P.—How to Meet Cholera: a Handbook for Sanitary Authorities &c. (Knight & Co.)—Pneumatic Drainage: a Description of the "Berlier System"; by Adolphe Smith, F.C.S. (Spon.)

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, August 16th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 10	29·62	W.	60	53	113	69	57	..	Cloudy
,, 11	29·89	N.W.	61	56	113	70	53	..	Cloudy
,, 12	30·12	W.	68	60	112	73	50	..	Cloudy
,, 13	29·98	S.W.	69	62	121	84	58	..	Cloudy
,, 14	29·81	W.	69	63	121	77	63	..	Bright
,, 15	29·69	W.	62	57	107	69	57	..	Overcast
,, 16	30·03	N.W.	59	55	104	63	55	..	Cloudy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

GUATEMALA.

IN an address delivered at the opening of the California State Medical Society the President, Dr. L. C. Lane, gave some interesting particulars of the medical topography of this region—a region as yet but imperfectly known. The General hospital in the city of Guatemala is constructed in the form of a Greek cross, and the effect of such an arrangement must be singularly impressive to one standing in the centre and glancing along the four avenues, each lined with two rows of beds for the sick. The whole number of patients treated in this hospital during 1882 was 5490; of these there remained on Jan. 1st, 1883, 240, and the total number of deaths in 1882 was 433. In the treatment of the sick the use of stimulants has been abandoned and satisfactory results have followed the innovation. The curriculum of medical study embraces the usual subjects, and extends over six years of about ten months' annual study. Goître is of common occurrence, but tubercular consumption is rare. As epidemic diseases, cholera and small-pox occasionally present themselves, but, owing to the practice of vaccination, which is strongly encouraged by the medical profession, the latter disease is becoming more rare.

"TWINS."

To the Editor of THE LANCET.

SIR,—I must think that the percentage of twin cases mentioned by Mr. Chittenden in last week's LANCET is rather high, at least speaking from my own limited experience. I find that during the past two years I have attended 176 labours, but only five of them were twin cases. In each case the mother did well, and the mortality among the children was *nil*—that is to say, all the children lived some days. One curious fact I feel compelled to mention—viz., four of my five twin cases occurred in a country village some four miles from here, each case being not more than eighty yards from the other; and, what is more curious still, some few years since, Dr. Smyth attended a case of triplets (all still living) in the same populating district.

I think it would be exceedingly interesting if practitioners would (through your columns) give an analysis from time to time of the last 100 or more consecutive cases attended. With your permission I will set the example:—Total number of cases, 176: primiparæ, 35; males, 92; females, 80; forceps cases, 6; perforation required, 2; twin cases, 5; stillborn, 10; maternal deaths, 1, from uræmic poisoning six hours after confinement.

I am confident that were some such rough plan of analysis adopted by other practitioners much valuable information would be gained. As regards the causes of death in the stillborn cases, I may perhaps trouble you at some future time.—I am, Sir, yours truly,

Gorleston, August 9th, 1883. R. GODFREY BATELY.

OPPOSITION TO HOMŒOPATHY IN AUSTRIA.

ACCORDING to the Austrian papers, a medical man, named Schmidt, left a sum of £2500 some years ago for the purpose of establishing a chair of homœopathy at the Vienna Medical College. The Minister of Public Instruction invited Professor Seidelmann a short time since to report upon the technical value of homœopathy. His somewhat lengthy treatise (the views of which are fully agreed in by Professor Rokitansky) expresses the opinion that the teaching of homœopathy at the institution in question would be unworthy of the present situation of medical knowledge. Acting on this report, the Government is said to have refused to accept the legacy, the ultimate disposal of which is now a matter of some uncertainty.

Dr. Johnston.—Our correspondent is thanked for his communication, of which, however, we cannot avail ourselves. It is clear that he is perfectly correct when he states that he has "had no personal experience of the system that now prevails" in the Army Medical Department, and his conclusions on the subject are in consequence unsatisfactory.

Mr. Rawson.—The suggestion shall have consideration.

A SEVERE CASE OF ERYSIPELAS; RECOVERY.

To the Editor of THE LANCET.

SIR,—The following case appears to me worthy of being placed on record in your columns.

Anne P——, servant, aged eighteen, was taken ill on Sunday, July 1st, with sore-throat, burning pain in the face, backache, &c. I was sent for on Thursday, July 5th, and found her suffering from a sharp attack of erysipelas, face much swollen, eyelids closed with the swelling. The patient had been getting in clothes, hung out to dry, during a storm on the previous Saturday, and got wet through; her mistress had not allowed her to change her clothes, and she had been sent home in a cab on the Tuesday evening. On separating gently the eyelids a quantity of tears gushed out. The tongue was very red and dry; bowels relaxed; the patient had passed nothing but black water; temperature 102·3°; pulse 100. I ordered tincture of perchloride of iron and spirit of chloric ether, to be taken every four hours; also a lotion of sulphate of iron, to be applied warm. Next day she seemed worse, bowels had been opened ten times during the night, the motions had been, I was informed, like tar. She wandered very much, and complained of great pain at the top of the head, and had been very sick; the inflammation had spread. I drew the ring of caustic round the inflamed part; lotion and medicine to be continued; effervescing draughts were ordered; was being well nursed; beef-tea and Liebig's extract, every fifteen minutes, by teaspoonfuls; two ounces of whisky; also a mixture of hydrocyanic acid and tincture of ginger every half hour; temperature 104°; pulse 100. On the 7th slight improvement. The caustic had acted like a magic circle, stopping the inflammation spreading to the scalp; bowels improved, also sickness; temperature 102°; pulse 100. Next day she was much worse; inflammation had spread at one side, where the caustic had hardly marked; she was wandering and complaining greatly of pain in the head; diarrhœa; temperature 105·2°; pulse 120; had had a very bad night. Nourishment persevered with; whisky, compound tincture of cardamoms, and aromatic spirit of ammonia, every half hour. Evening, no better, had been very delirious, and tried to get out of bed; imagined all sorts of animals were about her, and her father was murdering her sister, &c.; got down half an ounce of whisky; sleeping draught (opium) in half an hour.—9th: Great improvement in every way.—10th: Still more improvement; temperature 99°; pulse 100; bowels not so loose; appetite improving. On the 12th (the eleventh day of the disease) very much worse; temperature 106°; bowels opened ten times during the night; had been very sick; great pain at the top of the head and pain at the stomach; inflammation returned in eyelids and cheeks. I drew a line of caustic well round the inflamed parts; lotion to be discontinued and violet powder dusted on; the mixture of hydrocyanic acid and tincture of ginger to be repeated every half hour (the tincture of iron had been continued all along). Throat very swollen, could hardly swallow; temperature 106°; pulse 100. I was sent for in the afternoon and informed that the patient was dying. On arrival, I found her apparently sinking fast, and was told she had had a severe struggle for breath, had turned very blue, and stopped breathing, to all appearance, for some minutes afterwards. She was wandering and quite unconscious of anything, kept putting her hand to her head, and was evidently in much pain. The throat was greatly swollen, and she could hardly swallow, but she took three teaspoonfuls of whisky-and-water; the inflammation had not spread beyond the caustic; she rallied a little. I had to leave to see other patients. Ordered the whisky and beef-tea to be persevered with; temperature 106°; pulse 130. Evening: Surprised to find her alive and a little better; temperature still 103° and pulse 130; no spread of inflammation; the skin inside the ring of caustic was so swollen that it overlapped and completely hid the black ring; pain in head better; whisky swallowed; sleeping draught repeated.—13th: Much improved, had had three hours' sleep; inflammation improved; bowels open only once in the night; pain in head much better; had asked for some cheese; temperature 100°; pulse 100. From this date she made a gradual recovery. I should like to draw attention, first, to the great rise of temperature on the eleventh day, with recovery, and, secondly, to the manner in which the caustic stopped the spread of the inflammation.—I am, Sir, yours obediently,

Owston, August 13th, 1883. PERCY POPE, M.R.C.S., L.R.C.P.

AMERICAN DEGREES.

G. de Courcy Morris, M.D. New York, L.S.A.—The publication of our correspondent's letter will be more opportune when the registration of American degrees comes within the range of law. Meantime we are persuaded that the best teachers in the States would not recommend the general registration of American degrees. Our correspondent's (a British practitioner in the United States) letter is not seriously contradicted by Dr. Morris, and does not seem to us proof of a "jealous turn of mind."

A Subscriber (Llanfyllin).—Surgeons of Yeomanry Cavalry Corps receive 11s. 4d. a day during the eight days the corps is out for training. We are not aware of any other advantages they enjoy. No allowance is made towards the purchase of uniform or equipments.

PRIVATE DISPENSARIES.

To the Editor of THE LANCET.

SIR,—References to private dispensaries are rarely palatable, but they are seldom as illogical and unjust as that made by "B. G. M." in your issue of last week, when he says that the supporters of such dispensaries "sacrifice their professional feelings to commercial speculations, gain being the primary object."

Is such a statement fair, first, theoretically, and, secondly, practically? First, theoretically. Let us suppose two medical men, A. and B., of equal standing and ability, A. taking guinea fees, B. shilling fees, and let us successively make (1) their income the same and (2) the number of their patients the same. In the first case, B. will see twenty-one patients to A.'s one; he will therefore be twenty-one times more useful. In the second, B.'s receipts will be to A.'s as one is to twenty-one, and the advantages of his "commercial speculation" in the same proportion. In both cases all that money can command will be available to A. in his treatment, whilst B. will have to contend with all the drawbacks of poverty. The task of B. will therefore be heavier, his medical resources and his ingenuity more put to the test. If such is the case, and it evidently is, does B. sacrifice his "professional feelings" merely because he attends patients who cannot afford to pay him high fees, or, in other words, are "professional feelings" a question of £ *s. d.*?

Secondly, practically. Suppose a newly qualified man, with some ability, a love of his profession, a desire to rise in its ranks, and very limited means. A dispensary offers to him an extensive and varied practice, a good opportunity for obtaining a wide experience, and gives him a livelihood at the price of pretty hard and unpleasant work. Is it unprofessional of him to profit by that offer, and should he, rather than take anything but high fees, lose year after year, doing nothing, earning nothing, forgetting all that he knows, and being altogether useless to society?

If I have made it evident that theoretically and practically private dispensaries need not be commercial speculations (what speculations?), would it not be well for such correspondents as "B. G. M." to think before they make such baseless though damaging statements?

I am, Sir, yours truly,

June 25th, 1883. AUDI ALTERAM PARTEM.

Mr. A. Pierson.—We regret that we cannot insert our correspondent's letter, as we think the subject matter of it has already been clearly brought to the notice of our readers.

Mr. Robert Jones.—The question is too vague to admit of a satisfactory reply.

Dr. Joseph Lighthouse.—The case is too far back for further comment.

"GONORRHŒAL RHEUMATISM."

To the Editor of THE LANCET.

SIR,—In reply to "Subscriber" I would suggest that he make a trial of the fluid extract of manaca (Franciscea uniflora), in five minim doses every three hours. This drug is manufactured by Parke, Davis, and Co., whose London agents are Burgoyne and Co., of 16, Coleman-street.

For some time past I have been treating all my cases of acute rheumatism, both gonorrhœal and otherwise, with this medicine, and have secured results quite equal to that given by salicylate of soda in most cases. In some instances, where the latter drug quite failed, manaca has cut short the disease in a few hours.

I am, Sir, yours truly,

Moorgate-street, E.C., GEO. HERSCHELL, M.D. Lond.
Aug. 13th, 1883.

To the Editor of THE LANCET.

SIR,—I had, some time ago, a bad case of the above, which, after everything else had failed, immediately yielded to balsam of copaiba. At the same time, I would recommend that the parts be painted twice daily with equal portions of the tincture of iodine and the tincture of belladonna. If "Subscriber" gives this treatment a trial, it would be interesting to hear the result.—I am, Sir, yours truly,

August 12th, 1883. ANOTHER SUBSCRIBER.

To the Editor of THE LANCET.

SIR,—I would recommend "Subscriber" to keep his patient in bed and give him half-drachm doses of spirit of nitrous ether, every four hours, mixed with a little hot water and slightly sweetened. I once treated a case thus very satisfactorily.—I am, Sir, yours truly,

August 13th, 1883. G. H.

"OUT-PATIENT DEPARTMENTS."

To the Editor of THE LANCET.

SIR,—I heartily agree with your correspondent, "A. D.," as to the need of reform in our hospital out-patient departments, but emphatically dissent from him as to the line such reform should take. A person, at least as much entitled to consideration as any of our hospital patients, recently made an appointment for 11 A.M. with one of our most eminent consultants; she was kept waiting till 1 o'clock before she was seen, and such cases are, of course, common enough in private practice; while with regard to hospital out-patients the only alternative to keeping some of them waiting is for the physician who sees them to wait their pleasure in coming and consequently to prolong his hours of attendance from four or more indefinitely.

Having under my charge two of the largest out-patient departments in London, and having till lately been attached to a third, allow me to contradict some of the positive statements of "A. D." Male cases are not invariably taken first; at one of the institutions I know males and females are taken simultaneously by two physicians, at the other four or five males are seen alternately with an equal number of females. The time of attendance is not either 1 or 12.30; in some cases it is 11, in others 12, in others 2; and finally it is a mistake to imagine that all out-patients are cases of less urgent nature than in-patients. People frequently attend our out-patient departments in a nearly moribund condition, and most of the worst cases to be found within the hospital have been sent there from the out-patient department. I maintain that people not actually laid up by disease have every inducement to go to a hospital in preference to a consultant, for the same medical man may be seen, the best drugs obtained, both free of expense, and not infrequently excellent refreshments may be had while waiting for the doctor. I enclose my card, and am, Sir, yours truly,

August 13th, 1883. D. A. K.

Indian Medical Officer and others.—Our correspondents are thanked for their communications, but we think enough has been published on the subject at present.

Dr. Joseph Lighthouse.—The case is too far back for further comment.

REMOVAL OF A PIECE OF STEEL EMBEDDED IN THE LOIN FOR TWENTY YEARS.

To the Editor of THE LANCET.

SIR,—The following case I think worth bringing under your notice and that of the medical profession.

John H——, seaman on the s.s. *Lord Gough*, American liner, came to consult me on June 27th, during our voyage from Liverpool to Philadelphia. He complained of great pain and a hard swelling in the left lumbar region, which prevented him from attending to his duties. I examined the spot, and found it very much inflamed and hard, and something black protruding from the centre. I then questioned the man as to whether he had received a hurt of any kind, and he stated that about twenty years ago he was a sailor on an English ship named the *Henrietta*, and was lying in Shanghai, and alongside of them were a number of Chinese junks. He went on board one of them, and when returning to his ship was set upon by some foreign police and stabbed by one of the same in the back with a cane-sword. He was under the doctor's care for about three weeks suffering from what he thought to be a fractured rib, but after that time he was considered cured, and did not feel any pain or inconvenience until May last. Having received this history, I proceeded to make a closer examination, and found a piece of sharp-pointed steel about 3½ in. long and 3-16th in. wide, corroded, about 1½ in. from the point, and presenting at the other end an old fracture. This had become encysted in the muscles of the back. I at once extracted it, and then applied linseed poultices to draw away the pus which had formed, and after a few days' treatment the man was perfectly well, and able to go back to his duty.

I am, Sir, yours truly,

August 6th, 1883. L.R.C.S.I.

Mr. Sydney R. Hodge will find the information he desires in Wooton's Guide to the Medical Profession, published by Upcott Gill, Strand.

Mr. Spalding.—Messrs. Wrench of Ipswich, we believe, are the manufacturers.

"ARREST OF DEVELOPMENT."

To the Editor of THE LANCET.

SIR,—Noticing the case of the above in THE LANCET of August 4th by Mr. Ashmead, and as he says it is the only example of the kind he has met with, I send you particulars of a somewhat similar case, which occurred recently in my practice. On June 24th last I attended Mrs. L——, a healthy multipara, aged forty-eight, in her confinement, which, owing to being tedious, I terminated by delivering with forceps. The child (male), which was large and healthy, was born with spina bifida, double talipes varus, and the knee-joints, instead of flexing in the natural manner from before backwards, move in the opposite direction. It also had inguinal hernia. The child has continued healthy with the exception of a slight attack of aphtha. The mother in this case attributes her misfortune to having a child for some months during her early pregnancy suffering from St. Vitus's dance.

I am, Sir, faithfully yours,

J. R. WHITE, M.B., &c.

The Awberries, Kelvedon Hatch, Brentwood, August 5th, 1883.

ETHER AS A RESTORATIVE.

To the Editor of THE LANCET.

SIR,—I am desirous of adding my testimony to the value of ether subcutaneously injected. I have used it for some years, and with good results, while in some cases, as in the one detailed below, with marvellous success.

In March, 1877, I was asked to meet Mr. H——, of Croydon, to see Mr. J. B——, aged about forty-five, suffering from typhoid fever in its last stage (I think the fifth week of the attack). I found him in a state of muttering delirium, pulse scarcely to be felt, picking the bedclothes with his fingers, sinking down in the bed, &c. His tongue was black and quite filled his mouth; lips swollen and covered with black sordes, and very pinched and exhausted aspect. It was quite evident there was no possibility of giving any medicine by the mouth in his present state. I therefore suggested to Mr. H—— that we should inject ether. He agreed to the proposal, so, as I had brought both syringe and ether with me, I proceeded to inject twenty drops deep into the muscular tissue of the right thigh, to be repeated every four hours. We arranged to meet for another consultation on Monday (this being Saturday) if the patient were still alive, when, meeting Mr. H—— on the Monday and asking after the patient, he said, "Oh! he's all right, and setting up in bed drinking a glass of champagne." His tongue was clean, and, in fact, he was what is called "out of danger." He made a quick recovery without a drawback, except tenderness and pain in the soles of the feet, which he has had for months.

I think there can be no doubt that in this case the ether had a marvellous effect. From the recollection of this case I have determined to use ether, or perhaps some other acid, subcutaneously should cholera come under my care. I am, Sir, yours truly,

Cornhill, E.C., August 11th, 1883. JOHN LACEY.

Registered Government Pauper.—The tone of the latter part of our correspondent's letter is scarcely worthy of a member of a distinguished profession.

THERAPEUTICAL MEMORANDA.

To the Editor of THE LANCET.

SIR,—It may be helpful to place on record a risk that attends the combination of the subnitrate of bismuth with alkalies.

A lady, who has just left London for a remote part of Scotland, requested me to prescribe an antacid, she was accustomed to take, in a concentrated form for convenience in packing. Accordingly, I prescribed—℞ Sodæ sesquicarb. ʒvj, bismuthi albi ʒss, mucilaginis ʒiij, acid. hydrocyan. dil., ℥xlviii., aquam ad fl. oz. vi. Sgt. ʒij (by measure), in a wineglassful of water every four or six hours. The result of this combination, on two occasions, was to yield an amount of gaseous decomposition sufficient to burst the bottle. Pharmaceutists are well aware of the instability of this salt of bismuth, which is apt to become acid, and an article on the subject in the *Pharmaceutical Journal* of Jan. 3rd, 1883, fully explains the characteristics of the subnitrate of bismuth. Another salt of bismuth, the carbonate of bismuth, is free from this risk, and, being identical in dose, should be substituted for the subnitrate when it is necessary to prescribe other alkalies in combination.

I am, Sir, yours truly,

Oxford terrace, W., Aug. 13th, 1883. H. CRIPPS LAWRENCE.

A Subscriber.—The fee in such a case, we apprehend, should go to the principal in whose service the assistant was acting.

A RASH STATEMENT!

To the Editor of THE LANCET.

SIR,—On March 27th of this year a young German gentleman consulted me for syphilis. He had a typical hard sore which had just appeared, twenty-four days after intercourse. I put him upon mercury with chalk, one grain, with extract of opium, one-sixth of a grain, to be taken three times a day. This he took without interruption until June 6th. He was then in Berlin, his gums were getting tender, and, feeling anxious about his condition, he consulted a well-known German specialist. That gentleman, after dwelling on the superior advantages of inunctions, looked at my prescriptions and gravely stated that probably the English climate and mode of life necessitated such extreme doses of mercury, but he felt assured that, in Germany, out of 100 patients so treated, in twenty years, ninety-nine of them would be the victims of some fearful internal disease. Is it possible that my foreign *confrère* mistook the abbreviation gr. for grammo?

I am, Sir, yours very faithfully,

August 13th, 1883. HENRY HOOLE, M.B. Lond.

STRANGULATED OMENTAL HERNIA.

To the Editor of THE LANCET.

SIR,—I think the following case will tend to prove "the reality of the occurrence of symptoms of strangulation in hernia containing omentum only."

On September 5th, 1882, I operated on a female patient who was suffering from what was evidently a strangulated left inguinal hernia. On opening the sac I found that it contained omentum only; this omentum was of the size of a walnut and was adherent to the sac by recent adhesions, which I broke down. After dividing the stricture I returned the omentum into the abdomen. The symptoms of strangulation subsided immediately after the operation and the patient made a rapid recovery.

I am, Sir, yours truly,

Poole, August 6th, 1883. HERBERT A. LAWTON.

DEGREES, GOWNS, AND HOODS.

IN reference to the short notice we gave in our issue of the 28th ult. of the Rev. T. W. Wood's work on "Degrees, Gowns, and Hoods," Dr. Richard Neale reminds us that in THE LANCET, September, 1863, a series of papers appeared upon this subject, giving a tabular view of the different hoods, &c.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Gamgee, Manchester; Sir H. W. Peek, Wimbledon; Dr. Bristowe, London; Dr. Alfred Carpenter, London; Dr. Lightburne, Newry; Dr. Herschell, London; Mr. Lacey, London; Dr. Patterson, Glasgow; Dr. Wadham, London; Mr. Stoltz, Liverpool; Mr. Canning, Hull; Mr. R. Jones; Mr. De C. Morris; Mr. P. Spalding; Dr. Emmerson, Biggleswade; Mr. Slack; Mr. A. Jeaffreson, York; Dr. Illingworth, Clayton Moors; Dr. James Thompson, London; Dr. Evatt, Woolwich; Dr. T. W. Hime, Sheffield; Mr. E. P. Griffith, Zanzibar; Mr. Milligan, Norwood; Mr. Metcalfe, London; Baron von Hube, Nottingham; Mr. Waller, Edinburgh; Mr. S. Turner, London; Mr. T. H. Clarke, London; Mr. W. Bain, Heaton Chapel; Mr. Illingworth; Mr. Chater, Dublin; Dr. Thompson, Ulverstone; Dr. J. Johnston, Edinburgh; Dr. Theodore Williams, London; Dr. Armstrong, Newcastle-on-Tyne; M. Ch. Richet, Paris; Mr. Forrester, Preston; Dr. Grally Hewitt, London; Mr. Benham; Dr. J. Mackie, Alexandria; Mr. F. Mowatt, Patcham; Messrs. Mayer and Meltzer, London; Dr. Esnor, London; Mr. Ch. Gross, London; Mr. R. G. Bateley, Gorleston; Dr. Churton, Leeds; Mr. Shore, Southampton; Dr. R. Neale; Dr. Longhurst, London; Brigade-Surgeon Thornton; Mr. J. B. Sutton, London; Mr. Bingham, Alfreton; Mr. Greenwood, London; Mr. Yeomans, Sheffield; Mr. Bryan; Mr. Price, Watford; Mr. Coates; Mr. Hamel; Mr. Field, Bradford; Mr. C. Day, London; Mr. Milne, Ladywell; Mr. S. Hodge, London; Mr. Sell, London; Messrs. Daniel Smith and Co., London; Mr. Gamgee, Birmingham; Mr. Parmeter, Southend; Dr. Marsden, London; Mr. Birchall, Liverpool; Messrs. Laurie and Co.; Mr. Isley, Trowbridge; Mr. Smith, Brighton; Dr. Needham, Gloucester; Mr. Heap, Birkenhead; Messrs. Douglas and Ormrod, Workington; Mr. Hemmons, Bristol; Mr. Cookson, Great Malvern; Mr. Warren, Sheffield; Mr. Wyley, Belfast; Mr. G. Brown, London; Mr. Rawson; Mr. Atkinson, London; Mr. Gordon Holmes, London; Dr. Edwin Payne, London; Dr. A. W. Barclay, London; Surgeon-Major Morice; Dr. R. H. Lloyd, London; Dr. H. Donkin, Baden-Baden; Mr. D. Davies, Liverpool; Mr. Cox, Denbigh; Dr. Weatherly, Portishead; Mr. H. C. Hopkins, Bath; Messrs. Johnson and Co., York; Mr. Lloyd, Liverpool; Mr. Roe, Droitwich; Messrs. Knight and Co., London; Mr. Scott, Manchester; Mr. Schneider; Transfer; M.B., York; Locum; Pickwick; M.D., Bishopsgate; M.R.C.S.; Subscriber; M. A. P.; Another Subscriber; G. H.; An Old Sufferer; D. A. K.; Indian Medical Officer; A. G.; Medicus, St. Leonards; K. J.; M.R.C.P. Ed.; Nuntius; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Duke, Brighton; Mr. Lumley, London; Dr. Hodston, Edinburgh; Dr. Peck, Oxford; Dr. MacVicar, Moffat; Mr. Horne, Sandwich; Messrs. Broad and Son, Hornsey; Mr. Water, Salisbury; Messrs. Bennett Brothers; Mr. Griffiths, Lincoln; Mr. Tomlinson; Mr. Robinson, Sunderland; Mr. Wight, Edinburgh; Mr. Hughes, Ombersley; Messrs. Slinger and Sons, York; Mr. Edwards, Harold; Mr. Callard, St. John's-wood; Mr. Jones, Sheffield; Mr. Edgelow, London; Mr. Walker, London; Dr. Roberts, Chester; Mrs. Howell, Chorlton-on-Medlock; Mr. White, Ashburton; Dr. Lawrence, Chepstow; Messrs. Roberts and Co., Southgate; Mr. Bagshaw, Salford; Messrs. Beal and Co., Brighton; Miss Beresford, Shrewsbury; Mr. Gilkes, Newbury; Messrs. Sharp, Birmingham; Dr. Blumer, Sunderland; Mr. Bowlby; Mr. Walker, Arbroath; Dr. Renton, Knaresboro'; Messrs. Porteous and Co., Glasgow; Dr. Boyes, Pill; Dr. Fraser, Hampstead; Dr. Broderick, Tavistock; Mr. Swale, Widnes; Mr. Cottes, Walsall; Dr. Harvey, Wirksworth; Mr. Bryan, Wolverhampton; Mr. Toyne, Sheffield; Mr. Ward, Wigan; Mr. Lory, Bristol; Alpha, Lewisham; Celeritus; J. K.; Nesfield, Old Trafford; Medicus, Southwark; Dr.; Medicus, Tunbridge Wells; L. M.; Alpha, Leeds; X. P. T.; Delta, London; D., Maldon; M.R.C.S., Lyncombe; H. W., Southport; Horatius; L. A. N.; C. W. D.; Alpha; Dr. S., Penistone; A. B.; E. M. D., Kennington; M. G., Battersea; D. R.; Z., Tavistock; Nemo; Hon. Sec., Kentish-town; T. D., York; Physician; M.D., Leicester; Zeta; E. J., Tring; Exchange; P. E., Battersea; Beta; H. O. M.; S. A., Upper Norwood; H. R. F., London; &c., &c.

Sheffield Daily Telegraph, Aberdeen Journal, Pullen's Kent Argus, Bury and Suffolk Standard, St. Stephen's Review, Philanthropist, Surrey Comet, Papermakers' Circular, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, August 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, August 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, August 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, August 25.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 68, Rue Caumartin, Paris.